

GEOMETRY Improv'd:

1. By a LARGE and ACCURATE

T A B L E

O F

SEGMENTS of CIRCLES,

Its Construction and various Uses in the Solution of several difficult *Problems*.

With Compendious TABLES for finding a true Proportional Part, and their Use in these or any other TABLES; exemplify'd in making out *Logarithms* or Natural Numbers from them, to sixty Figures, there being a TABLE of them for all Primes to 1100, true to 61 Figures.

2. A Concise TREATISE of

P O L Y E D R A,

O R

SOLID BODIES of many BASES,

Both the Regular and others: To which are added Twelve New ones, with various Methods of forming them, and their exact Dimensions in Surds or Species, and in Numbers; Illustrated with Variety of Copper Plates.

By A. S. Philomath.

L O N ^D O N:

Printed for Richard Mount on Tower-Hill, and
John Sprint in Little-Britain. 1717.

GEOMETRY



ST. GEORGE'S

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1-0 N-D O N

ERRATA.

In the first Discourse.

Pag. 3, l. 24, r. 005880 &c. p. 5, l. 22, r. 0034377300632625541349; l. 23, r. 4965622699367374458652.
 Pag. 10, Tab. V. col. 4, l. 7, r. 1,8682 &c. Pag. 12, l. 11, r. *supernumerary*; l. 45, for *is* r. *viz.*
 Pag. 14, l. 7, r. 87,04325; l. 15, r. 87,0433. Pag. 19, l. 34, r. 9070030509; l. 35, r. 72,176634.
 Pag. 22, l. 2, r. *or right lin'd Triangles*. Pag. 24, l. ult. r. $c - \frac{1}{2}d + \frac{1}{2}f$.
 Pag. 26, l. *penult.* r. 230,427975406310515. Pag. 30, l. 4, r. 9309,514516446932745.
 Pag. 31, l. 28, the end, r. *that*. Pag. 35, l. 10, r. *Difference*.

In the TABLE of SEGMENTS and their Differences.

against 0052 r. 00063,55873,0025881. 0317 r. 00948,99504,1737610. 083 $\frac{1}{2}$ r. 7,04640,69,52677.
 086 $\frac{1}{2}$ r. 7,15630,3764254. 105 $\frac{1}{2}$ r. 7,82106,1686400 1250 r. 07214 &c. 1504 r. 09442,41216,8520542.
 176 $\frac{1}{2}$ r. 9,69858,9008823. 184 $\frac{1}{2}$ r. 9,87653,7979210. 204 $\frac{1}{2}$ r. 10,33465 &c. 218 $\frac{1}{2}$ r. 10,80101 &c.
 238 $\frac{1}{2}$ r. *last Fig.* 9, 2695 r. 21727 &c. 2867 r. 23689,63563 &c. 3448 r. *last Fig.* 3.
 3588 r. 32263,75964 &c. 3610 r. 32532 &c. 3737 r. 34091,67273,2396299,3909 r. 36219,98578 &c.
 398 $\frac{1}{2}$ r. 12,46860,9000426. 435 $\frac{1}{2}$ r. 12,62683,7614182. 4764 r. 46996,27076,6670330.
 4946 r. *the last Fig.* 8. 497 $\frac{1}{2}$ r. 12,73221,6598380.

In the TABLE for the Hyperbolic Section.

050 r. 39584 &c. 055 r. 39541 &c. 14 $\frac{7}{8}$ r. 10,12023,6598623. 166 r. *last Fig.* 1.

In the TABLE of Logarithms.

103 r. *the ninth Section* 23496. 277 r. *first Fig.* 2. r. 947.

In the latter Discourse.

Pag. 66, l. 36, r. 141421356 &c. Pag. 68, l. 43, for VX r. YX. Pag. 74, l. 18, r. $\frac{1}{2}b^2$.
 Pag. 75, l. 39, for IZ r. LZ. Pag. 76, l. 15, for Gy r. Gq; l. 16, r. qkYCDq.
 Pag. 79, l. 40, r. $+\frac{1}{2}b^2\sqrt{10}$. Pag. 81, l. 40, r. 1538 $\sqrt{5}$.
 Pag. 88, l. 26, r. $\frac{1}{2}b\sqrt{\frac{1}{2}} - \frac{1}{2}\sqrt{5} = 470228201833978$ &c. Pag. 89, l. 12, r. $\frac{3}{11}b\sqrt{5} - \frac{1}{11}b$ without a Line over.
 Pag. 90, l. 40, r. $\sqrt{2} - 2\sqrt{5}$. Pag. 96, l. 10, r. 2071024452283040000; l. 11, r. 7505269120000 $\sqrt{5}$.

GEOMETRY Improv'd, &c.

The Construction and Use of the TABLE of SEGMENTS of CIRCLES.

THE Solution of many useful and difficult Cases and Problems especially in Solid Geometry, necessarily depending upon the previous Knowledge of the Area's of the Segments of a Circle; it has been not a little surprizing, that no better or more accurate Tables of those Segments were extant, than such as consist only of five, or at most, of six Decimal Figures, which, though they may serve tolerably for common Mechanical Uses, yet are by no means to be accounted sufficient for the satisfaction of the Mathematically ingenious; so that by reason of the Deficiency of the Tables, I have many times found my self under a necessity of calculating *de novo* such Area's of Segments as my occasions requir'd, ere I could sufficiently illustrate, or satisfactorily determine the Truth of the Solution of those Problems I had undertaken; finding such an Examination very necessary for the preventing or correcting the Mistakes such tedious Algebraic Operations are exceedingly obnoxious to: It has seem'd very strange, that none of those ingenious Persons, whose Leisure and capacities have sufficiently qualified them for Calculations of this nature, (as has been evident in their successful Performances in matters not very much different) should not have thought of, or at least, not judg'd, such a Work as this, worth the Undertaking and Prosecution; though it must be acknowledg'd, these Tables not being of such universal Usefulness as those of the Sines, &c. and the Operation in composing them so extremely laborious and tedious, may in some measure account for this almost general Neglect. Nevertheless, the Failure of others, and the Difficulty of the Work, were so far from discouraging, that, together with other Considerations, they animated me to so operose an Undertaking, presuming I might have some Methods and Conveniences for the Prosecution and Compleating of such a Work, wherewith few others (perhaps) might be so well accommodated.

It's obvious upon the first Inspection, this Table of Area's of Segments is not calculated by the common Methods, *viz.* from the Tables of Natural Sines, the largest and exactest whereof that are extant, fall short of these, two or three Figures; besides, the Operation thereby is far more tedious and less certain, not being capable of such a Proof, as the Method here propos'd, and by which it was prosecuted affords: Which was by two different Series, the *One* accommodated to the composing the Segments in the Beginning or End of the Table, the *Other* to those in the Middle.

In the former, supposing *C* the Versed Sine, which is always given suited to a Circle whose Diameter is an Unite, or 1,000000 &c. Then the Series adapted to Use will run thus, $2\sqrt{C} \times \frac{1}{3} - \frac{1}{5} C - \frac{1}{7} C^3 - \frac{1}{9} C^5 - \frac{1}{11} C^7 - \frac{1}{13} C^9 - \frac{1}{15} C^{11} - \frac{1}{17} C^{13} - \frac{1}{19} C^{15} - \frac{1}{21} C^{17} - \frac{1}{23} C^{19} - \frac{1}{25} C^{21} - \frac{1}{27} C^{23} - \frac{1}{29} C^{25} - \frac{1}{31} C^{27} - \frac{1}{33} C^{29} - \frac{1}{35} C^{31} - \frac{1}{37} C^{33} - \frac{1}{39} C^{35} - \frac{1}{41} C^{37} - \frac{1}{43} C^{39} - \frac{1}{45} C^{41} - \frac{1}{47} C^{43} - \frac{1}{49} C^{45} - \frac{1}{51} C^{47} - \frac{1}{53} C^{49} - \frac{1}{55} C^{51} - \frac{1}{57} C^{53} - \frac{1}{59} C^{55} - \frac{1}{61} C^{57} - \frac{1}{63} C^{59} - \frac{1}{65} C^{61} - \frac{1}{67} C^{63} - \frac{1}{69} C^{65} - \frac{1}{71} C^{67} - \frac{1}{73} C^{69} - \frac{1}{75} C^{71} - \frac{1}{77} C^{73} - \frac{1}{79} C^{75} - \frac{1}{81} C^{77} - \frac{1}{83} C^{79} - \frac{1}{85} C^{81} - \frac{1}{87} C^{83} - \frac{1}{89} C^{85} - 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\frac{1}{765} C^{761} - \frac{1}{767} C^{763} - \frac{1}{769} C^{765} - \frac{1}{771} C^{767} - \frac{1}{773} C^{769} - \frac{1}{775} C^{771} - \frac{1}{777} C^{773} - \frac{1}{779} C^{775} - \frac{1}{781} C^{777} - \frac{1}{783} C^{779} - \frac{1}{785} C^{781} - \frac{1}{787} C^{783} - \frac{1}{789} C^{785} - \frac{1}{791} C^{787} - \frac{1}{793} C^{789} - \frac{1}{795} C^{791} - \frac{1}{797} C^{793} - \frac{1}{799} C^{795} - \frac{1}{801} C^{797} - \frac{1}{803} C^{799} - \frac{1}{805} C^{801} - \frac{1}{807} C^{803} - \frac{1}{809} C^{805} - \frac{1}{811} C^{807} - \frac{1}{813} C^{809} - \frac{1}{815} C^{811} - \frac{1}{817} C^{813} - \frac{1}{819} C^{815} - \frac{1}{821} C^{817} - \frac{1}{823} C^{819} - \frac{1}{825} C^{821} - \frac{1}{827} C^{823} - \frac{1}{829} C^{825} - \frac{1}{831} C^{827} - \frac{1}{833} C^{829} - \frac{1}{835} C^{831} - \frac{1}{837} C^{833} - \frac{1}{839} C^{835} - \frac{1}{841} C^{837} - \frac{1}{843} C^{839} - \frac{1}{845} C^{841} - \frac{1}{847} C^{843} - \frac{1}{849} C^{845} - \frac{1}{851} C^{847} - \frac{1}{853} C^{849} - \frac{1}{855} C^{851} - \frac{1}{857} C^{853} - \frac{1}{859} C^{855} - \frac{1}{861} C^{857} - \frac{1}{863} C^{859} - \frac{1}{865} C^{861} - \frac{1}{867} C^{863} - \frac{1}{869} C^{865} - \frac{1}{871} C^{867} - \frac{1}{873} C^{869} - \frac{1}{875} C^{871} - \frac{1}{877} C^{873} - \frac{1}{879} C^{875} - \frac{1}{881} C^{877} - \frac{1}{883} C^{879} - \frac{1}{885} C^{881} - \frac{1}{887} C^{883} - \frac{1}{889} C^{885} - \frac{1}{891} C^{887} - \frac{1}{893} C^{889} - \frac{1}{895} C^{891} - \frac{1}{897} C^{893} - \frac{1}{899} C^{895} - \frac{1}{901} C^{897} - \frac{1}{903} C^{899} - \frac{1}{905} C^{901} - \frac{1}{907} C^{903} - \frac{1}{909} C^{905} - \frac{1}{911} C^{907} - \frac{1}{913} C^{909} - \frac{1}{915} C^{911} - \frac{1}{917} C^{913} - \frac{1}{919} C^{915} - \frac{1}{921} C^{917} - \frac{1}{923} C^{919} - \frac{1}{925} C^{921} - \frac{1}{927} C^{923} - \frac{1}{929} C^{925} - \frac{1}{931} C^{927} - \frac{1}{933} C^{929} - \frac{1}{935} C^{931} - \frac{1}{937} C^{933} - \frac{1}{939} C^{935} - \frac{1}{941} C^{937} - \frac{1}{943} C^{939} - \frac{1}{945} C^{941} - \frac{1}{947} C^{943} - \frac{1}{949} C^{945} - \frac{1}{951} C^{947} - \frac{1}{953} C^{949} - \frac{1}{955} C^{951} - \frac{1}{957} C^{953} - \frac{1}{959} C^{955} - \frac{1}{961} C^{957} - \frac{1}{963} C^{959} - \frac{1}{965} C^{961} - \frac{1}{967} C^{963} - \frac{1}{969} C^{965} - \frac{1}{971} C^{967} - \frac{1}{973} C^{969} - \frac{1}{975} C^{971} - \frac{1}{977} C^{973} - \frac{1}{979} C^{975} - \frac{1}{981} C^{977} - \frac{1}{983} C^{979} - \frac{1}{985} C^{981} - \frac{1}{987} C^{983} - \frac{1}{989} C^{985} - \frac{1}{991} C^{987} - \frac{1}{993} C^{989} - \frac{1}{995} C^{991} - \frac{1}{997} C^{993} - \frac{1}{999} C^{995} - \frac{1}{1001} C^{997} - \frac{1}{1003} C^{999} - \frac{1}{1005} C^{1001} - \frac{1}{1007} C^{1003} - \frac{1}{1009} C^{1005} - \frac{1}{1011} C^{1007} - \frac{1}{1013} C^{1009} - \frac{1}{1015} C^{1011} - \frac{1}{1017} C^{1013} - \frac{1}{1019} C^{1015} - \frac{1}{1021} C^{1017} - \frac{1}{1023} C^{1019} - \frac{1}{1025} C^{1021} - \frac{1}{1027} C^{1023} - \frac{1}{1029} C^{1025} - \frac{1}{1031} C^{1027} - \frac{1}{1033} C^{1029} - \frac{1}{1035} C^{1031} - \frac{1}{1037} C^{1033} - \frac{1}{1039} C^{1035} - \frac{1}{1041} C^{1037} - \frac{1}{1043} C^{1039} - \frac{1}{1045} C^{1041} - \frac{1}{1047} C^{1043} - \frac{1}{1049} C^{1045} - \frac{1}{1051} C^{1047} - \frac{1}{1053} C^{1049} - \frac{1}{1055} C^{1051} - \frac{1}{1057} C^{1053} - \frac{1}{1059} C^{1055} - \frac{1}{1061} C^{1057} - \frac{1}{1063} C^{1059} - \frac{1}{1065} C^{1061} - \frac{1}{1067} C^{1063} - \frac{1}{1069} C^{1065} - \frac{1}{1071} C^{1067} - \frac{1}{1073} C^{1069} - \frac{1}{1075} C^{1071} - \frac{1}{1077} C^{1073} - \frac{1}{1079} C^{1075} - \frac{1}{1081} C^{1077} - \frac{1}{1083} C^{1079} - \frac{1}{1085} C^{1081} - \frac{1}{1087} C^{1083} - \frac{1}{1089} C^{1085} - \frac{1}{1091} C^{1087} - \frac{1}{1093} C^{1089} - \frac{1}{1095} C^{1091} - \frac{1}{1097} C^{1093} - \frac{1}{1099} C^{1095} - \frac{1}{1101} C^{1097} - \frac{1}{1103} C^{1099} - \frac{1}{1105} C^{1101} - \frac{1}{1107} C^{1103} - \frac{1}{1109} C^{1105} - \frac{1}{1111} C^{1107} - \frac{1}{1113} C^{1109} - \frac{1}{1115} C^{1111} - \frac{1}{1117} C^{1113} - \frac{1}{1119} C^{1115} - \frac{1}{1121} C^{1117} - \frac{1}{1123} C^{1119} - \frac{1}{1125} C^{1121} - \frac{1}{1127} C^{1123} - \frac{1}{1129} C^{1125} - \frac{1}{1131} C^{1127} - \frac{1}{1133} C^{1129} - \frac{1}{1135} C^{1131} - \frac{1}{1137} C^{1133} - \frac{1}{1139} C^{1135} - \frac{1}{1141} C^{1137} - \frac{1}{1143} C^{1139} - \frac{1}{1145} C^{1141} - \frac{1}{1147} C^{1143} - \frac{1}{1149} C^{1145} - \frac{1}{1151} C^{1147} - \frac{1}{1153} C^{1149} - \frac{1}{1155} C^{1151} - \frac{1}{1157} C^{1153} - \frac{1}{1159} C^{1155} - \frac{1}{1161} C^{1157} - \frac{1}{1163} C^{1159} - \frac{1}{1165} C^{1161} - \frac{1}{1167} C^{1163} - \frac{1}{1169} C^{1165} - \frac{1}{1171} C^{1167} - \frac{1}{1173} C^{1169} - \frac{1}{1175} C^{1171} - \frac{1}{1177} C^{1173} - \frac{1}{1179} C^{1175} - \frac{1}{1181} C^{1177} - \frac{1}{1183} C^{1179} - \frac{1}{1185} C^{1181} - \frac{1}{1187} C^{1183} - \frac{1}{1189} C^{1185} - \frac{1}{1191} C^{1187} - \frac{1}{1193} C^{1189} - \frac{1}{1195} C^{1191} - \frac{1}{1197} C^{1193} - \frac{1}{1199} C^{1195} - \frac{1}{1201} C^{1197} - \frac{1}{1203} C^{1199} - \frac{1}{1205} C^{1201} - \frac{1}{1207} C^{1203} - \frac{1}{1209} C^{1205} - \frac{1}{1211} C^{1207} - \frac{1}{1213} C^{1209} - \frac{1}{1215} C^{1211} - \frac{1}{1217} C^{1213} - \frac{1}{1219} C^{1215} - \frac{1}{1221} C^{1217} - \frac{1}{1223} C^{1219} - \frac{1}{1225} C^{1221} - \frac{1}{1227} C^{1223} - \frac{1}{1229} C^{1225} - \frac{1}{1231} C^{1227} - \frac{1}{1233} C^{1229} - \frac{1}{1235} C^{1231} - \frac{1}{1237} C^{1233} - \frac{1}{1239} C^{1235} - \frac{1}{1241} C^{1237} - \frac{1}{1243} C^{1239} - \frac{1}{1245} C^{1241} - \frac{1}{1247} C^{1243} - \frac{1}{1249} C^{1245} - \frac{1}{1251} C^{1247} - \frac{1}{1253} C^{1249} - \frac{1}{1255} C^{1251} - \frac{1}{1257} C^{1253} - \frac{1}{1259} C^{1255} - \frac{1}{1261} C^{1257} - \frac{1}{1263} C^{1259} - \frac{1}{1265} C^{1261} - \frac{1}{1267} C^{1263} - \frac{1}{1269} C^{1265} - \frac{1}{1271} C^{1267} - \frac{1}{1273} C^{1269} - \frac{1}{1275} C^{1271} - \frac{1}{1277} C^{1273} - \frac{1}{1279} C^{1275} - \frac{1}{1281} C^{1277} - \frac{1}{1283} C^{1279} - \frac{1}{1285} C^{1281} - \frac{1}{1287} C^{1283} - \frac{1}{1289} C^{1285} - \frac{1}{1291} C^{1287} - \frac{1}{1293} C^{1289} - \frac{1}{1295} C^{1291} - \frac{1}{1297} C^{1293} - \frac{1}{1299} C^{1295} - \frac{1}{1301} C^{1297} - \frac{1}{1303} C^{1299} - \frac{1}{1305} C^{1301} - \frac{1}{1307} C^{1303} - \frac{1}{1309} C^{1305} - \frac{1}{1311} C^{1307} - \frac{1}{1313} C^{1309} - \frac{1}{1315} C^{1311} - \frac{1}{1317} C^{1313} - \frac{1}{1319} C^{1315} - \frac{1}{1321} C^{1317} - \frac{1}{1323} C^{1319} - \frac{1}{1325} C^{1321} - \frac{1}{1327} C^{1323} - \frac{1}{1329} C^{1325} - \frac{1}{1331} C^{1327} - \frac{1}{1333} C^{1329} - \frac{1}{1335} C^{1331} - \frac{1}{1337} C^{1333} - \frac{1}{1339} C^{1335} - \frac{1}{1341} C^{1337} - \frac{1}{1343} C^{1339} - \frac{1}{1345} C^{1341} - \frac{1}{1347} C^{1343} - \frac{1}{1349} C^{1345} - \frac{1}{1351} C^{1347} - \frac{1}{1353} C^{1349} - \frac{1}{1355} C^{1351} - \frac{1}{1357} C^{1353} - \frac{1}{1359} C^{1355} - \frac{1}{1361} C^{1357} - \frac{1}{1363} C^{1359} - \frac{1}{1365} C^{1361} - \frac{1}{1367} C^{1363} - \frac{1}{1369} C^{1365} - \frac{1}{1371} C^{1367} - \frac{1}{1373} C^{1369} - \frac{1}{1375} C^{1371} - \frac{1}{1377} C^{1373} - \frac{1}{1379} C^{1375} - \frac{1}{1381} C^{1377} - \frac{1}{1383} C^{1379} - \frac{1}{1385} C^{1381} - \frac{1}{1387} C^{1383} - \frac{1}{1389} C^{1385} - \frac{1}{1391} C^{1387} - \frac{1}{1393} C^{1389} - \frac{1}{1395} C^{1391} - \frac{1}{1397} C^{1393} - \frac{1}{1399} C^{1395} - \frac{1}{1401} C^{1397} - \frac{1}{1403} C^{1399} - \frac{1}{1405} C^{1401} - \frac{1}{1407} C^{140$

To render the Operation more easy and expeditious, reduce these Fractions or Coefficients of every Term of the Series into Decimals, and make a Table of each multiplied to 100; these, as far as necessary, are specified in the Example below.

Suppose the Versed Sine given be ,23, to which the Area of the Segment is requir'd, $C = ,23$; $C^2 = ,0529$; $C^3 = ,012167$; $C^4 = ,00279841$; $C^5 = ,0006436343$; $C^6 = ,000148035889$; $C^7 = ,00003404825447$; $C^8 = ,0000078310985281$; $C^9 = ,000001801152661463$; $C^{10} = ,00000041426511213649$; $C^{11} = ,00000009528-097579139$; $C^{12} = ,00000002191462443202$; $C^{13} = ,00000000504036361936$; $C^{14} = ,000000000115928363245$; $C^{15} = ,000000000266335235464$; $C^{16} = ,000000000-06232610416$; $C^{17} = ,00000000001410500396$; $C^{18} = ,0000000000032441509$; $C^{19} = ,0200000000007461547$; $C^{20} = ,00000000000017161558$; $C^{21} = ,00000000-000003947158$; $C^{22} = ,00000000000000907846$; $C^{23} = ,00000000000000208805$; $C^{24} = ,00000000000000048025$.

The SERIES.

$\frac{1}{2} C =$	—,046	$2C \sqrt{C} =$	.46 $\sqrt{,23}$
$\frac{1}{2} C^2 =$	—18892857142857143	$\sqrt{,23} =$	.47958315233127195416
$\frac{1}{72} C^3 =$	—1689861111111111		
$C^4 \times ,0071022727272727 =$	—198750710227273		
$C^5 \times ,0042067307692307692 =$	—27075962139423		
$C^6 \times ,002734375 =$	—4047856339844		
$C^7 \times ,0018956801470588235 =$	—645446000408		
$C^8 \times ,001378109580592105 =$	—107921119081		
$C^9 \times ,00103905087425595 =$	—18714892476		
$C^{10} \times ,00080639383067255 =$	—3340608307		
$C^{11} \times ,00064071655273 =$	—610480984		
$C^{12} \times ,0005190990589 =$	—113758609		
$C^{13} \times ,0004275338403 =$	—21549260		
$C^{14} \times ,000357099118 =$	—4139792		
$C^{15} \times ,000301911072 =$	—805001		
$C^{16} \times ,00025797223 =$	—158204		
$C^{17} \times ,00022249592 =$	—31383		
$C^{18} \times ,0001934954 =$	—6277		
$C^{19} \times ,000169525 =$	—1265		
$C^{20} \times ,0001495178 =$	—257		
$C^{21} \times ,0001331999 =$	$52^6 + C^{22} \times ,000118361 = 10^7 = 63$		
$C^{22} \times ,000106126 =$	$2^{21} + C^{24} \times ,000095593 = 05 = 3$		

The Sum of the Series — 0480813368956226164

deducted out of $\frac{1}{2}$ — 6666666666666666667

leaves the Remainder — 6185853297710440503, which multiplied by $\sqrt{,23}$: produces ,29666310243747671498, and this drawn into $2C = ,46$, becomes = ,1364650-2712123928889, the Area of the Segment of such a Circle whose Diameter is 2, and whose Area is = ,7853981633974483096, by which it being divided, or rather, for expedition, multiplied by its reciprocal 1,27323954473516268615, is rendred ,1737526-690041183408 being the Area of the Segment of a Circle whereof the whole Area is 1, and Versed Sine ,23.

Though the composing this Series be laborious and tedious enough in this part of the Table, and the nearer it approaches to the Middle, the Operation by this Method will still require the more Labour and Time; yet it admits of a very valuable Convenience, which that by the Sines is not capable of. For this Series being thus completed, serves

serves without any more Labour in that part, except the Transcribing and Addition, for the obtaining two more Segments (at least) nearer the Beginning of the Table, where the Calculation is unavoidably necessary, which may be dispatch'd with so much Facility and Expedition, as doth abundantly compensate the trouble in the first raising the Series. This encourag'd the proceeding in this Method as far as to 3000, since hereby all the Segments necessary to be calculated from the Beginning down to ,0300 were obtain'd at a much easier expence of Labour and Time, and to greater Exactness, than could have been expected by other Methods.

Verfed Sine ,023 = C *The Series.*

$$\begin{aligned} \frac{1}{2} C + \frac{1}{2} C^3 &= \text{---} 0046 \quad 16898611111111 \\ \frac{1}{2} C^3 &= \text{---} 1889285714285714 \\ C^4 \times ,007102272727 &= \text{---} 198750710227 \\ C^5 \times ,004206730769 &= \text{---} 2707596214 \\ C^6 \times ,002734375 &= \text{---} 40478563 \\ C^7 \times ,00189568 &= \text{---} 645446 \\ C^8 \times ,00137811 &= \text{---} 10792 \\ C^9 \times ,001039 &= \text{---} 187 \\ C^{10} \times ,000806 &= \text{---} 3 \end{aligned}$$

The Sum of the Series --- 00461906385824838257
deducted out of $\frac{1}{2}$ --- 66666666666666666667
there remains --- 66204760280841828410

which being multiplied by $2C\sqrt{C} = ,046\sqrt{,023} = ,00697624540852742651$ will produce ,0046186065493188174, which is the Segment when the whole Area is ,785398, &c. and being multiplied by 1,273239544735162686 becomes ,00588059250016553179, the Segment when the whole Area is 1, and the Verfed Sine ,023.

Verfed Sine = ,0023 = C. *The Series.*

$$\begin{aligned} \frac{1}{2} C + \frac{1}{2} C^3 &= \text{---} ,00046 \quad 18892857142857 \\ \frac{1}{2} C^3 &= \text{---} 168961111111 \\ C^4 \times ,00721022727 &= \text{---} 19875071 \\ C^5 \times ,00420673 &= \text{---} 27076 \\ C^6 \times ,002734 &= \text{---} 41 \end{aligned}$$

The Sum of the Series --- 00046018909775656156
Subtracted from $\frac{1}{2}$ --- 66666666666666666667
leaves --- 66620647756891010511

which multiplied by $2C\sqrt{C} = ,0046\sqrt{,0023} = ,0002206082500723850989$ produces the Segment ,00014697064520364934, when the whole Area is ,785398, &c. and being drawn into 1,273239, &c. is reduced to 00018712883738816549, which is the Segment when the whole Area is 1.

Since the former Series cannot (as has been intimated) without insupportable Labour be applied to the raising Segments further than 3000, make use of another peculiarly adapted to the composing all from thence, orsomewhat nearer the Beginning, to the Middle, or ,5000, which is capable of all the Conveniences of the former, and in some respects much more commodious and expeditious.

The Method is this.

Double the Verfed Sine given, the Square of the Complement of that to 1, call x , then will the Segment be = half the Area of the Circle --- $\frac{1}{2} \sqrt{x} \times 1 - \frac{1}{2} x - \frac{1}{40} x^2 -$

$\frac{1}{112} x^3 - \frac{1}{1152} x^4 - \frac{7}{3816} x^5 - \frac{21}{13312} x^6 - \frac{33}{20720} x^7 - \frac{429}{337040} x^8 - \frac{715}{1243184} x^9 -$
 $\frac{2431}{5305024} x^{10} - \frac{4199}{12051824} x^{11} - \frac{29393}{104837200} x^{12} - \frac{52063}{226491416} x^{13} - \&c.$ Here, as in the former, I reduc'd all the Coefficients except the three first into Decimals, and compos'd

pos'd Tables thereof to 100 for the readier multiplication: Since for the greater certainty all betwixt 2000 and 3000 were wrought by both Series. To illustrate the Operation the better, and render the Proof clear and evident, I shall instance in the same Segment, whose Versed Sine is, 23, which doubled is, 46, the Complement of that to 1, is, 54 = $\sqrt{x}$, it's Square, 2916 = x ; $x^2 = ,08503056$; $x^3 = ,024794911296$; $x^4 = ,0072301961339136$; $x^5 = ,0021083251926492$; $x^6 = ,000614787626176508$; $x^7 = ,00017927207179307$; $x^8 = ,00005227573613486$; $x^9 = ,0000152436046569$; $x^{10} = ,000004445035118$; $x^{11} = 00000129617224$; $x^{12} = 000000377963825$; $x^{13} = ,00000011021425$; $x^{14} = ,000000032138476$; $x^{15} = 0000000093715795$; $x^{16} = ,00000000273275$; $x^{17} = ,00000000079687$; $x^{18} = ,00000000023237$; $x^{19} = ,000000000067758$; $x^{20} = ,000000000019758$; $x^{21} = ,0000000000057615$; $x^{22} = 0000000000016801$; $x^{23} = 00000000000048991$; $x^{24} = 00000000000014286$; $x^{25} = 000000000000041657$.

The SERIES.

$\frac{1}{2} x =$ —————,0486	$x^{17} x ,0001176050 =$ 93716
$\frac{1}{4} x^2 =$ —————2125764	$x^{18} x ,0001019773 =$ 23696
112) $x^3 =$ —————221383136571429	$x^{19} x ,0000891097 =$ 6038
$x^4 x ,0043402777777778 =$ -- 31381059609	$x^{20} x ,0000784057 =$ 1549
$x^5 x ,00248579545454545 =$ -- 5240865180594	$x^{21} x ,000069419 =$ 400
$x^6 x ,0015775240384615 =$ ———969842258842	$x^{22} x ,000061811 =$ 104
$x^7 x ,00107421875 =$ ———192577420871	$x^{23} x ,000055321 =$ 27
$x^8 x ,00077012005974 =$ ———40258593037	$x^{24} x ,000049747 =$ 7
$x^9 x ,00057421232525 =$ ———8753065675	$x^{25} x ,000044928 =$ 3
$x^{10} x ,00044159662156 =$ ———1962912491	
$x^{11} x ,0003482155178 =$ ———451347288	125540
$x^{12} x ,0002803134918 =$ ———105948360	
$x^{13} x ,0002296015068 =$ ———25305358	
$x^{14} x ,0001908633216 =$ ———6134056	
$x^{15} x ,000160694603 =$ ———1505962	
$x^{16} x ,00013680345 =$ ———373850	
x^{17} to $x^{25} =$ —————125540	

Sum of the Series ———050984983046352351

The Sum of the Series ———,050984983046352351

Subtracted out of ———1,

There remains ———,949015016953647649

Which multiply'd by $\frac{1}{2}\sqrt{x} = ,27$ is ———,2562340545774848655

This taken from $\frac{1}{4}$ the Area of the Circle } = ,3926990816987241548
whose Diameter is 2

There will remain ,1364650271212392893, which is the Area of the Segment of that Circle, agreeing with that deduc'd from the former Series in the 18th Figure, and being multiply'd by 1,2732395 &c. is reduc'd to ,1737526690041183413 being the Area of the Segment of that Circle whose whole Area is 1, and Versed Sine, 23, the same with the former to 18 Fig. or more readily, the Product of $\frac{1}{2}\sqrt{x} = ,256234$ &c. drawn into 1,273239 &c. is reduc'd to ,3262473309958816587, which deducted out of $\frac{1}{4}$ the Area the Circle = ,5, leaves the Remainder ,1737526690041183413 as before.

By this Series also other Segments nearer the Middle may be obtain'd, viz. 473 and 4973, after this manner, $473 \times 2 = 946$, whose Complement to 1 is = ,054 = $\sqrt{x}$.

The SERIES.

$\frac{1}{2}x =$ ----- ,000486
 $\frac{1}{4}x^2 =$ ----- 2125764
 $\frac{1}{8}x^3 =$ ----- 22138313657
 $x^4 \times ,0043402777, \&c. =$ ----- 31381060
 $x^5 \times ,00248579545 =$ ----- 52409
 $x^6 \times ,001577 =$ ----- 97
 Sum of the Series ----- ,00048621279809747223
 deducted from 1,
 there remains ----- ,99951378720190252777
 which multiplied by $\frac{1}{2}\sqrt{x} = ,027$ is ----- ,02698687225445136825
 And this by 1,2732, &c. is reduc'd to ,034360752943083653578
 which subtracted from ,5 leaves ----- ,465639247056916346422
 The Segment answering the Versè Sine, 473, the whole Area being 1.

4973 $\times$ 2 = 9946, whose Compliment to 1 is, ,0054 = $\sqrt{x}$.

The SERIES.

$\frac{1}{2}x + \frac{1}{4}x^2 =$ ----- ,00600486007125764
 $\frac{1}{8}x^3 =$ ----- 2214
 Sum of the Series ----- ,0000048600212578614
 subtracted out of 1,
 there remains, ----- ,9999951399787421386
 This multiplied by $\frac{1}{2}\sqrt{x} = ,0027$ is ----- ,0026999868779426037742
 And this by 1,2732, &c. is made ----- ,003437736063262625541349
 which deducted from ,5 leaves ----- ,49656226993673704458651
 The Segment answering the Versèd Sine 4973, when the whole Area of the Circle is 1.

By these Methods were calculated all the Segments to ,0100, from thence every fifth to 0400, from that every twenty-fifth to 1600; from thence every fortieth to 5000, viz. all from 0001 to 3000 by the former Series, and all from 2000 to 5000 by the latter: The intermediate were interpol'd by the Method of Quinquesection propos'd and exemplified in *Brigg's Arithmetica Logarithmica*; only observing, that in correcting the Differences, the proper parts of the third and fifth correct Differences must be added to the first mean Difference, but the subordinate correct Differences must be subtracted from all the rest. Here I found myself under a necessity of contriving and using a new Method of Bisection or Halving, not meeting with any thing relating thereto in any Author I had perus'd; though this might have been managed in the same manner as the Quinquesection, viz. by dividing and correcting all the Differences successively; yet judging that too tedious a Method, I attempted to make the first Differences directly and immediately out of the succeeding, without any previous Correction, concluding that to be more expeditious. Herein I used none but the even Differences, viz. 2^d, 4th, 6th, 8th, &c. taking the

half Sum of the two next on either side, which I call the Mean. Then to compose the less first Difference, which in this Part of the Table is always the former, the Rule is: To half the first given Difference add the Products of the fourth mean Difference multiplied by $\frac{3}{12}$ or ,0234375, and of the eighth mean $\times \frac{3}{12}$ or ,001068115234375; and of the 12th Mean $\times \frac{3}{12}$ = ,000055074617724609375: From that Sum subtract $\frac{1}{4}$ of the second Mean Difference, and the Products of the sixth mean $\times \frac{5}{12}$ or ,0048828125, and of the tenth mean $\times \frac{5}{12}$ = ,000240325927734375. For the greater first Difference, which here is the latter; to half the first given Difference add $\frac{1}{4}$ of the second mean Difference, and the Products of the sixth mean $\times \frac{5}{12}$ = ,0048828125, and of the tenth mean $\times \frac{5}{12}$ = ,000240325927734375; from this Sum subtract the Products of the fourth mean $\times \frac{3}{12}$ = ,0234375, and of the eighth mean $\times \frac{3}{12}$ = ,001068115234375, and of the twelfth mean $\times \frac{3}{12}$ &c. For Example; If it be required to bisect the Space betwixt ,0020 and ,0021, or from the Differences to make the Segment answering the Versed Sine ,00205; The first Difference given is ,00001151756377441; the 2 next second Differences on either side are $\left\{ \begin{array}{l} 28389475157 \\ 27700711704 \end{array} \right\}$, $\frac{1}{2}$ their Sum = 28045093430⁵ is the second mean Difference, $\frac{1}{4}$ hereof is 3505636678¹². The two fourth Differences on either side are $\left\{ \begin{array}{l} 53631054 \\ 47458796 \end{array} \right\}$ the half Sum 50544925 is the fourth mean Difference, $\frac{3}{12}$ of it is = 1184646⁶⁷⁹⁷; The two sixth Differences on either side are $\left\{ \begin{array}{l} 1186562 \\ 951290 \end{array} \right\}$ their half Sum 1068926 is the sixth mean, $\frac{5}{12}$ of it is 5219³⁶⁵²; The two eighth Differences $\left\{ \begin{array}{l} 75311 \\ 54658 \end{array} \right\}$ half their Sum 64984⁵ is the eighth mean, $\frac{5}{12}$ hereof is 694¹⁰⁹; The two tenth Differences $\left\{ \begin{array}{l} 9592 \\ 6182 \end{array} \right\}$ the $\frac{1}{2}$ Sum 7887 is the tenth mean, $\frac{5}{12}$ of it is 182545; The two twelfth Differences $\left\{ \begin{array}{l} 2045 \\ 1617 \end{array} \right\}$ half the Sum 1831 the twelfth mean $\times \frac{3}{12}$ is 0¹⁰⁰⁸⁴.

$$\begin{array}{r}
 \frac{1}{2} \text{ the first Diff. } ,000005758781887205 \\
 4^{\text{th}} \text{ mean } \times ,0234375 = 1184646^{68} \\
 8^{\text{th}} \text{ mean } \times ,001068115 = 694^{11} \\
 12^{\text{th}} \text{ mean } \times ,000055075 = 0^{10} \\
 \hline
 575879373436^{69} \\
 \text{Subtr. } 2^{\text{d}} + 6 + 10 = 3505641900^{07} \\
 \text{the first less Diff.} = 572373731536^{62} \\
 \text{Segm. } ,0020 \quad ,00015175153776039 \\
 ,00205 = ,00015747527507575^{6}
 \end{array}$$

$$\begin{array}{r}
 \frac{1}{2} \text{ of the second mean} = 3505636678^{12} \\
 6^{\text{th}} \text{ mean } \times ,0048828125 = 5219^{37} \\
 10^{\text{th}} \text{ mean } \times ,0002403259 = 189 \\
 \hline
 ,00000003505641900^{07}
 \end{array}$$

$$\begin{array}{r}
 \frac{1}{2} \text{ the first Diff. given} = ,000005758781887205 \\
 \text{add the Sum of the } 2^{\text{d}} + 6^{\text{th}} + 10^{\text{th}} = ,00000003505641900^{07} \\
 \hline
 57938383062037 \\
 \text{Subtract the Sum of the } 4^{\text{th}} + 8^{\text{th}} + 12^{\text{th}} = 1184716^{19} \\
 \hline
 \text{The greater first Difference} = ,00000579382645904^{38} \\
 \text{Subtract this greater first Diff. out of the Segment } ,0021 = ,00016326910153480 \\
 \text{There will remain the Segment for } ,00205 = ,00015747527507575^{6} \\
 \text{which is undoubtedly true in the 17th Place.}
 \end{array}$$

In the very same Order must the Results of the Differences be applied to the Logarithms, Tangents, Secants, Powers, &c. only the greater Difference in the Logarithms is the former, the less the latter. But in the Sines, Versed Sines, &c. whose Differences increase and decrease alternately, the Products of all the Differences must be added to half the first in composing the greater; but all must be subtracted from it to make the less first Difference sought.

If it be requir'd that this Method for Bisection should be farther continued, by the following Rule it may be extended *in infinitum*. Let A represent the Fraction by which the second mean Difference is to be multiplied; B that for the fourth mean Diff. C that for the sixth; D that for the eighth; E that for the tenth, &c. then $\frac{1}{2} \times \frac{1}{2} = A$, $\frac{1}{4} A \times \frac{1}{4} = B$, $\frac{1}{4} B \times \frac{1}{4} = C$, $\frac{1}{4} C \times \frac{1}{4} = D$, $\frac{1}{4} D \times \frac{1}{4} = E$, $\frac{1}{4} E \times \frac{1}{4} = F$, $\frac{1}{4} F \times \frac{1}{4} = G$, $\frac{1}{4} G \times \frac{1}{4} = H$, $\frac{1}{4} H \times \frac{1}{4} = I$, $\frac{1}{4} I \times \frac{1}{4} = K$, &c. Hence may be easily collected $A = \frac{1}{4}$, $B = \frac{1}{16}$, $C = \frac{1}{64}$, $D = \frac{1}{256}$, $E = \frac{1}{1024}$, $F = \frac{1}{4096}$, $G = \frac{1}{16384}$, $H = \frac{1}{65536}$, $I = \frac{1}{262144}$, $K = \frac{1}{1048576}$, &c. This last being the Coefficient for the Twentieth mean Difference. The Operation, I presume, will rarely, if ever proceed so far, having observ'd that ordinarily if the twelfth Difference exceed 5 Figures, the remoter Differences will encrease; consequently the Subdivision cannot be perform'd truly by any other Method save by Calculation.

The Table by these Methods being subdivided into Parts so numerous as rendred it, in my Opinion, sufficiently bulky, I extended it only to one Semicircle of 5000; the latter Part being no other than the Complements of these to 10000, &c. and so easily, even almost by Inspection, obtain'd from these, that I thought it needless and superfluous to transcribe them.

The various Uses of the Table come next in order to be insisted on, which being the principal Thing in View in the whole Work, to expatiate more largely thereupon may justly be accounted reasonable. That which first offers, and is a necessary Introduction to the rest, is the making out by a true Proportion the Segment or Tabular Number exactly suited and answering to any Versed Sine or Marginal Number proposed; and *contra* the Versed Sine to any Segment propos'd, the Performance whereof to such a Degree of Nicety and Exactness as the Tables are capable of, I doubt not to undertake: Though it may seem out of the common Road, and attended with no small Difficulty, since the Tabular Numbers extend to so many Figures as make several Ranks of Differences beyond the first in every Part of it; so that it will no where fall under common Rules, nor indeed near the Beginning can it be brought to submit to any Rule (without the Amputation of several Figures) which in that Part is unavoidable otherwise than by a new Calculation, which there indeed is most easie: Considering the numerousness of the Differences, especially near the Beginning, to every of which a due Respect must be had in order to the making out a true proportional Part, there was a Necessity of composing Tables adapted to every Rank of Differences from the Third to the Tenth, for the Correction of the Second and thereby the First, neither of which need any Tables. The vast Expence of Labour and Time in the Computation of these Tables will not easily be credited; but the Method taken therein was such as all along the Process both exemplified and prov'd the Truth of the Work: They are in all Eight, beginning with that for the third Difference, and proceeding to the tenth, every of them was more difficult and troublesome in the composing than the next preceding, admitting of more Differences, the following extending one further than the former: Consequently all are terminate, the first Differences being equal in the Ist Table, the second in the II^d, &c. and the eighth in the VIIIth; in all after the II. alternately increasing and decreasing as the Sines: Those for the

odd.

odd Differences, viz. 3^d, 5th, 7th, 9th, resembling and depending upon each other: So likewise those for the Even, viz. 4th, 6th, 8th, 10th; so that there was no attempting the following till the former was perfected; those for the even Differences rise higher, or contain more Integers than the Odd, and still the more the further remote, and the more intricate: Many of the Numbers terminate in a Fraction, and cannot be perfectly express'd otherwise; the Numbers are complete in all, except the last, in several of which the Figures are too numerous.

The Integers in these Tables (though they be not always properly so, but only with respect to the Number of the Figures in the Differences by the following Rules determin'd) are clearly distinguish'd, being separated by a *Comma*. In the First there are none, in the Second and Third no more than one; nor more than three in the Fourth and Fifth; in the Sixth and Seventh they exceed not Four, but in all of the Eight there are Five.



Table

GEOMETRY Improv'd.

TABLE I.				TABLE II.				TABLE III.				TABLE IV.			
Rem. of Versed Sine.	No. of mult. third Diff.	1st Diff.	Numbers to Mult. the Fourth Differen.	1st Diff.	2d Diff.	Numbers to multiply the Fifth Difference.	1st Differ.	2d.	Numbers to Multiply the Sixth Difference.	1st Difference.	2d Differ.	3d diff.	Rem. of Vers. Sine.		
100	0,83		8,333333			8,333333		250	166,6666,666				100		
1	99	0,83	8,374581	4125	83	8,207091	12624	245	167,7680,279	4,1713,6125	196091	1617	199		
2	98	0,8	8,415	3041		8,0784	12869	246	168,8497,8	4,0817,5208	197708	158	298		
3	97	0,75	8,454581	3958		7,947308	13109	235	169,9117,6125	4,0619,8125	199291	155	397		
4	96	0,7	8,493333	3875		7,813866	13344	236	170,9538,133	4,0420,5208	20084	151	496		
5	95	0,75	8,53125	3791		7,678125	13574	225	171,9957,8125	4,0219,6791	20235	148	595		
6	94	0,7	8,568333	3708		7,540133	13799	226	172,9975,1333	4,0017,3208	20384	145	694		
7	93	0,7	8,604581	3525	83	7,399941	14019	215	173,9588,6125	9813,4791	20529	141	793		
8	92	0,7	8,64	3541		7,2576	14234	216	174,9196,8	9608,1875	20670	138	892		
9	91	0,65	8,674581	3458		7,113158	14444	205	175,8598,2791	9401,4791	20809	135	991		
10	90	0,6	8,708333	3375		6,966666	14649	206	176,7791,6666	9193,3875	20944	131	1090		
11	89	0,65	8,74125	3291	83	6,818175	14849	195	177,6775,6125	8983,9458	21075	128	1189		
12	88	0,6	8,773333	3208		6,667733	15044	196	178,5548,8	8773,1875	21204	125	1288		
13	87	0,6	8,804581	3125		6,515391	15234	185	179,4109,9458	8561,1458	21329	121	1387		
14	86	0,6	8,835	3041		6,3612	15416	186	180,2457,8	8347,8541	21450	118	1486		
15	85	0,55	8,864581	2958		6,205208	15595	175	181,0591,1458	8133,3458	21569	115	1585		
16	84	0,55	8,893333	2875	83	6,074666	15774	176	181,8508,8	7917,6541	21684	111	1684		
17	83	0,55	8,92125	2791		5,88808	15944	165	182,6209,6125	7700,8125	21795	108	1783		
18	82	0,5	8,948333	2708		5,726933	16109	166	183,3692,4666	7482,8541	21904	105	1882		
19	81	0,5	8,974581	2625		5,564241	16269	155	184,0956,2791	7263,8125	22009	101	1981		
20	80	0,5	9,0	2541		5,4	16424	156	184,8	7043,7208	22110	98	2080		
21	79	0,45	9,024581	2458	83	5,234258	16574	145	185,4822,6125	6822,6125	22209	95	2179		
22	78	0,45	9,048333	2375		5,067066	16719	146	186,1423,1333	6600,5208	22304	91	2278		
23	77	0,45	9,07125	2291		4,898475	16859	135	186,7800,6125	6377,4791	22395	88	2377		
24	76	0,4	9,093333	2208		4,728533	16994	136	187,3954,1333	6153,5208	22484	85	2476		
25	75	0,4	9,114581	2125		4,557291	17124	125	187,9882,8125	5928,6791	22569	81	2575		
26	74	0,4	9,135	2041	83	4,3848	17249	126	188,5555,8	5702,9875	22650	78	2674		
27	73	0,35	9,154581	1958		4,211108	17369	115	189,1062,2791	5476,4791	22739	75	2773		
28	72	0,35	9,173333	1875		4,036266	17484	116	189,5311,4666	5249,1875	22820	71	2872		
29	71	0,35	9,19125	1791		3,860325	17594	105	190,1322,6125	5021,1458	22875	68	2971		
30	70	0,35	9,208333	1708		3,683333	17699	106	190,6125	4792,875	22944	65	3070		
31	69	0,35	9,224581	1625		3,505341	17799	95	191,2087,9458	4562,8541	23009	61	3169		
32	68	0,3	9,24	1541		3,3264	17894	96	191,5020,8	4332,541	23070	58	3268		
33	67	0,25	9,24581	1458		3,146558	17984	85	191,9122,9458	4102,1458	23129	55	3367		
34	66	0,25	9,268333	1375		2,965866	18069	86	192,3993,8	3870,8541	23184	51	3466		
35	65	0,25	9,28125	1291		2,784375	18149	75	192,6632,8125	3639,0125	23235	48	3565		
36	64	0,2	9,293333	1208		2,602133	18224	76	193,0039,4666	3406,541	23284	45	3664		
37	63	0,2	9,304581	1125		2,419191	18294	65	193,3223,2791	3173,8125	23329	41	3763		
38	62	0,2	9,315	1041		2,2356	18359	66	193,6153,8	2940,5208	23370	38	3862		
39	61	0,15	9,324581	958		2,051408	18419	55	193,8860,6125	2706,8125	23409	35	3961		
40	60	0,15	9,333333	875		1,866666	18474	56	194,1333,3333	2472,7208	23444	31	4060		
41	59	0,14	9,34125	791		1,681425	18524	45	194,3571,6125	2238,2791	23475	28	4159		
42	58	0,15	9,348333	708		1,496733	18565	46	194,5575,1333	2003,5208	23504	25	4258		
43	57	0,15	9,354581	625		1,309641	18605	35	194,7333,6125	1768,4791	23529	21	4357		
44	56	0,1	9,36	541		1,122	18644	36	194,8876,8	1533,1875	23550	18	4456		
45	55	0,05	9,364581	458		0,936458	18674	25	195,0174,4791	1297,6791	23569	15	4555		
46	54	0,05	9,368333	375	83	0,749466	18699	26	195,1236,4666	1061,9875	23584	11	4654		
47	53	0,05	9,37125	291		0,562275	18719	15	195,2062,6125	826,1458	23595	8	4753		
48	52	0,05	9,373333	208		0,374983	18738	16	195,2652,8	590,1875	23604	5	4852		
49	51	0,05	9,374581	125		0,187491	18748	17	195,3006,9458	354,1458	23609	1	4951		
50	50	0,0	9,375	41		0,0	18749	18	195,3125	115,941	23610		5050		

TABLE V.				TABLE VI.			
Rem. of Vers. Sine.	Numbers for Multi- plying the Seventh Difference.	1st Difference.	2d.	Numbers for Multiplying the Eighth Difference.	1st Difference.	Rem. of Vers. Sine.	
0 00	119,04761,90476 ⁴ / ₁			3571,42857,14285,714 ³ / ₁		0 00	
1 99	117,43761,95416 ¹ / ₁	1,6099,99575 ² / ₁	449,13750	3597,99506,87078,125 ¹ / ₁	26,56649,72792,410 ¹ / ₁	1 99	
2 98	115,78273,62857 ² / ₁	1,6549,13255 ³ / ₁	441,81904 ¹ / ₁	3624,11931,37285,714 ² / ₁	26,12424,50207,589 ² / ₁	2 98	
3 97	114,08361,1125	1,6990,95160 ³ / ₁	434,38630 ² / ₁	3649,79565,58078,125 ³ / ₁	25,67634,20792,410 ³ / ₁	3 97	
4 96	112,34107,73333 ¹ / ₁	1,7425,33379 ¹ / ₁	426,84166 ¹ / ₁	3675,01854,72	25,22289,13921,875 ⁴ / ₁	4 96	
5 95	110,55585,9375	1,7852,17958 ¹ / ₁	419,18750	3699,78254,39453,125	24,76399,67453,125 ⁵ / ₁	5 95	
6 94	108,72872,2666	1,8271,36708 ¹ / ₁	411,42619 ¹ / ₁	3724,08230,67	24,29976,27546,875 ⁶ / ₁	6 94	
7 93	106,86044,3339	1,8682,79327 ¹ / ₁	403,56011 ¹ / ₁	3747,91260,15488,839 ⁷ / ₁	23,83029,48488,839 ⁷ / ₁	7 93	
8 92	104,95180,8	1,9086,35339 ¹ / ₁	395,59166 ¹ / ₁	3771,26830,08	23,35569,92511,160 ⁸ / ₁	8 92	
9 91	103,00361,3494	1,9481,94505 ¹ / ₁	387,52321 ¹ / ₁	3794,14438,37613,839 ⁹ / ₁	22,87608,29613,839 ⁹ / ₁	9 91	
10 90	101,01666,6666	1,9869,46827 ¹ / ₁	379,35714 ¹ / ₁	3816,53593,75	22,39155,37386,160 ¹⁰ / ₁	10 90	
11 89	98,99178,4125	2,0248,82541 ¹ / ₁	371,09583 ¹ / ₁	3838,43815,75828,125	21,90222,00828,125 ¹¹ / ₁	11 89	
12 88	96,92979,2	2,0619,92125 ¹ / ₁	362,74166 ¹ / ₁	3859,84634,88	21,40819,12171,875 ¹² / ₁	12 88	
13 87	94,83152,5708	2,0982,66291 ¹ / ₁	354,29702 ¹ / ₁	3880,75592,58703,125	20,90957,70703,125 ¹³ / ₁	13 87	
14 86	92,69782,9714	2,1336,95994 ¹ / ₁	345,76428 ¹ / ₁	3901,16241,41285,714 ¹⁴ / ₁	20,40648,82582,589 ¹⁴ / ₁	14 86	
15 85	90,52955,7291	2,1682,72422 ¹ / ₁	337,14583 ¹ / ₁	3921,06145,01953,125	19,89703,60667,410 ¹⁵ / ₁	15 85	
16 84	88,32757,02857	2,2019,87005 ¹ / ₁	328,44404 ¹ / ₁	3940,44878,26285,714 ¹⁶ / ₁	19,38733,24332,589 ¹⁶ / ₁	16 84	
17 83	86,09273,8875	2,2348,31410 ¹ / ₁	319,64130 ¹ / ₁	3959,32027,25578,125	18,87148,99292,410 ¹⁷ / ₁	17 83	
18 82	83,82594,1333	2,2667,95541 ¹ / ₁	310,84000 ¹ / ₁	3977,67189,43	18,35162,17421,875 ¹⁸ / ₁	18 82	
19 81	81,52806,3791	2,2978,79541 ¹ / ₁	301,8425	3995,49973,59578,125	17,82784,16578,125 ¹⁹ / ₁	19 81	
20 80	79,2	2,3280,63791 ¹ / ₁	292,85119 ¹ / ₁	4012,8	17,30026,47421,875 ²⁰ / ₁	20 80	
21 79	76,84265,1089	2,3573,48910 ¹ / ₁	283,76845 ¹ / ₁	4029,56900,38238,839 ²¹ / ₁	16,76900,38238,839 ²¹ / ₁	21 79	
22 78	74,45692,5333	2,3857,25755 ¹ / ₁	274,61666 ¹ / ₁	4045,80318,03	16,23417,64761,160 ²² / ₁	22 78	
23 77	72,04373,79107	2,4131,87422 ¹ / ₁	265,39821 ¹ / ₁	4061,49907,82988,839 ²³ / ₁	15,69589,79988,839 ²³ / ₁	23 77	
24 76	69,60401,0666	2,4397,27444 ¹ / ₁	256,11547 ¹ / ₁	4076,65336,32	15,15428,49011,160 ²⁴ / ₁	24 76	
25 75	67,13867,1875	2,4653,338791 ¹ / ₁	246,77083 ¹ / ₁	4091,26281,73828,125	14,60945,41823,125 ²⁵ / ₁	25 75	
26 74	64,64865,6	2,4900,15875 ¹ / ₁	237,36666 ¹ / ₁	4105,32434,77	14,06152,33171,875 ²⁶ / ₁	26 74	
27 73	62,13490,3458	2,5137,52541 ¹ / ₁	227,90535 ¹ / ₁	4118,83495,09328,125	13,51061,02328,125 ²⁷ / ₁	27 73	
28 72	59,59836,03809 ¹ / ₁	2,5365,43077 ¹ / ₁	218,38928 ¹ / ₁	4131,79178,42285,714 ²⁸ / ₁	12,95583,32957,589 ²⁸ / ₁	28 72	
29 71	57,03997,8375	2,5583,82005 ¹ / ₁	208,82083 ¹ / ₁	4144,19209,55203,125	12,40031,12917,410 ²⁹ / ₁	29 71	
30 70	54,46071,42857	2,5792,64089 ¹ / ₁	199,20238 ¹ / ₁	4156,03325,89285,714 ³⁰ / ₁	11,84116,34082,589 ³⁰ / ₁	30 70	
31 69	51,86152,9958	2,5991,84327 ¹ / ₁	189,53630 ¹ / ₁	4167,31276,81453,125	11,27950,92167,410 ³¹ / ₁	31 69	
32 68	49,24339,2	2,6181,37958 ¹ / ₁	179,825 ¹ / ₁	4178,02823,68	10,71546,86546,875 ³² / ₁	32 68	
33 67	46,60727,1541	2,6361,20458 ¹ / ₁	170,07083 ¹ / ₁	4188,17739,88078,125	10,14916,20078,125 ³³ / ₁	33 67	
34 66	43,954144	2,6531,27541 ¹ / ₁	160,27619 ¹ / ₁	4197,75810,87	9,58070,98921,875 ³⁴ / ₁	34 66	
35 65	41,28498,8839	2,6691,55160 ¹ / ₁	150,44345 ¹ / ₁	4206,76834,19363,839 ³⁵ / ₁	9,01023,32363,839 ³⁵ / ₁	35 65	
36 64	38,60078,9333	2,6841,99505 ¹ / ₁	140,575 ¹ / ₁	4215,20619,52	8,43785,32636,160 ³⁶ / ₁	36 64	
37 63	35,90253,2327	2,6982,57005 ¹ / ₁	130,67321 ¹ / ₁	4223,06988,66738,839 ³⁷ / ₁	7,86369,14738,839 ³⁷ / ₁	37 63	
38 62	33,19120,8	2,7113,24327 ¹ / ₁	120,74047 ¹ / ₁	4230,35775,63	7,28786,96261,160 ³⁸ / ₁	38 62	
39 61	30,46780,9625	2,7233,98375 ¹ / ₁	110,77916 ¹ / ₁	4237,06826,60203,125	6,71050,97203,125 ³⁹ / ₁	39 61	
40 60	27,73333,3333	2,7344,76291 ¹ / ₁	100,79166 ¹ / ₁	4243,2	6,13173,39796,875 ⁴⁰ / ₁	40 60	
41 59	24,98877,7875	2,7445,55458 ¹ / ₁	90,78035 ¹ / ₁	4248,75166,48328,125	5,55166,48328,125 ⁴¹ / ₁	41 59	
42 58	22,23514,43809 ¹ / ₁	2,7536,33494 ¹ / ₁	80,74761 ¹ / ₁	4253,72208,97285,714 ⁴² / ₁	4,97042,48957,589 ⁴² / ₁	42 58	
43 57	19,47343,6125	2,7617,08255 ¹ / ₁	70,69583 ¹ / ₁	4258,11022,66828,125	4,38813,69542,410 ⁴³ / ₁	43 57	
44 56	16,70465,82857	2,7687,77839 ¹ / ₁	60,62738 ¹ / ₁	4261,91515,06285,714 ⁴⁴ / ₁	3,80492,39457,589 ⁴⁴ / ₁	44 56	
45 55	13,92981,7708	2,7748,40577 ¹ / ₁	50,54464 ¹ / ₁	4265,13605,95703,125	3,22090,89417,410 ⁴⁵ / ₁	45 55	
46 54	11,14992,2666	2,7798,95041 ¹ / ₁	40,45 ¹ / ₁	4267,77227,47	2,63621,51296,875 ⁴⁶ / ₁	46 54	
47 53	8,36598,2625	2,7839,40041 ¹ / ₁	30,34583 ¹ / ₁	4269,82324,04953,125	2,05096,57953,125 ⁴⁷ / ₁	47 53	
48 52	5,57900,8	2,7869,74625 ¹ / ₁	20,23452 ¹ / ₁	4271,28852,48	1,46528,43046,875 ⁴⁸ / ₁	48 52	
49 51	2,79000,99226 ¹ / ₁	2,7889,98077 ¹ / ₁	10,11845 ¹ / ₁	4272,15781,88863,839 ⁴⁹ / ₁	87929,47863,839 ⁴⁹ / ₁	49 51	
50 00	0,00	2,7900,09922 ¹ / ₁		4272,46093,75	2,9311,86136,160 ⁵⁰ / ₁	50 00	

TABLE VII.			TABLE VIII.		
Rem. of Vers. Sine.	Numbers for Multiplying the Ninth Difference.	Difference.	Numbers for Multiplying the Tenth Difference.	Difference.	Rem. of Vers. Sine.
0 100	1984,12698,41269,842 $\frac{1}{2}$		79365,07936,50793,565 $\frac{1}{2}$		0 100
1 99	1958,90842,62964,7569 $\frac{1}{2}$	25218,55783,05084 $\frac{3}{4}$	79995,02391,70405,08160	529,94455,19611,43081	1 99
2 98	1932,86363,39885,7 $\frac{1}{2}$	26044,79230,79042 $\frac{1}{2}$	80614,91001,45783,4285 $\frac{1}{2}$	619,88609,75378,34697	2 98
3 97	1906,00439,80329,6875	26859,23595,560268	81224,58018,86002,859375	609,67017,40219,43080 $\frac{1}{2}$	3 97
4 96	1878,34281,30133,33 $\frac{1}{2}$	27661,58501,96354 $\frac{1}{2}$	81823,87961,80138,3 $\frac{1}{2}$	599,29942,94135,8072 $\frac{1}{2}$	4 96
5 95	1849,89127,19726,5625	28451,54104,0677 $\frac{1}{2}$	82412,65616,63818,359375	588,77654,83679,6927 $\frac{1}{2}$	5 95
6 94	1820,66246,10533,33 $\frac{1}{2}$	29228,81091,93229 $\frac{1}{2}$	82990,76041,78865,3 $\frac{1}{2}$	578,10425,15046,9739 $\frac{1}{2}$	6 94
7 93	1790,66935,40733,556 $\frac{1}{2}$	29993,10697,99776 $\frac{1}{2}$	83558,04571,25983,454613	567,28529,47118,12128	7 93
8 92	1759,92520,704	30744,14703,33556 $\frac{1}{2}$	84114,36818,10432,	556,32246,84448,545387	8 92
9 91	1728,44355,26024,0823 $\frac{1}{2}$	31481,65443,759176 $\frac{1}{2}$	84659,58677,80641,510169	545,21859,70209,510169	9 91
10 90	1696,23819,44444,44 $\frac{1}{2}$	32205,35815,796378 $\frac{1}{2}$	85193,56331,59722 $\frac{1}{2}$	533,97653,79080,712053	10 90
11 89	1663,32320,10192,1875	32914,99282,52256 $\frac{1}{2}$	85716,16249,69817,859375	522,59918,10095,637153	11 89
12 88	1629,71290,28266,66 $\frac{1}{2}$	33610,29879,2552 $\frac{1}{2}$	86227,25194,49258,3 $\frac{1}{2}$	511,08944,79440,8072 $\frac{1}{2}$	12 88
13 87	1595,42188,06355,729 $\frac{1}{2}$	34291,02219,109375	86726,70223,62468,6927 $\frac{1}{2}$	499,45029,13210,0260 $\frac{1}{2}$	13 87
14 86	1560,46490,56514 $\frac{1}{2}$	34956,91498,414434 $\frac{1}{2}$	87214,38693,02583,428	487,68469,40114,7352 $\frac{1}{2}$	14 86
15 85	1524,85723,06315,104 $\frac{1}{2}$	35607,73501,991815 $\frac{1}{2}$	87690,18259,86735,0260 $\frac{1}{2}$	475,79566,84151,598 $\frac{1}{2}$	15 85
16 84	1488,61398,45485,7 $\frac{1}{2}$	36243,24608,293898 $\frac{1}{2}$	88153,96885,43963,4 $\frac{1}{2}$	463,78625,57228,402530	16 84
17 83	1451,75076,66045,3125	36863,21794,404017 $\frac{1}{2}$	88605,62837,95712,859375	451,65952,51749,43080 $\frac{1}{2}$	17 83
18 82	1414,28334,01955,5 $\frac{1}{2}$	37467,42640,89756 $\frac{1}{2}$	89045,04695,28874,3 $\frac{1}{2}$	439,41857,33161,362847	18 82
19 81	1376,22768,68299,131 $\frac{1}{2}$	38055,65336,56423 $\frac{1}{2}$	89472,11347,61335,081597 $\frac{1}{2}$	427,76652,32460,859375	19 81
20 80	1337,6	38627,68682,99131 $\frac{1}{2}$	89886,72	414,60652,38654,918403	20 80
21 79	1298,41667,90099,1815 $\frac{1}{2}$	39183,32099,008184 $\frac{1}{2}$	90288,76174,91245,121280	402,04174,91245,121280	21 79
22 78	1258,69432,276	39722,35624,991815 $\frac{1}{2}$	90678,13714,63772,	389,37539,72526,878720	22 78
23 77	1218,44972,33896,65 $\frac{1}{2}$	40244,59927,033482 $\frac{1}{2}$	91054,74783,63826,787946 $\frac{1}{2}$	376,61069,00054,787946	23 77
24 76	1177,69986,048	40749,86300,9665 $\frac{1}{2}$	91418,49870,82752,	363,75087,18925,212054	24 76
25 75	1136,46189,37174,475 $\frac{1}{2}$	41237,96676,2552 $\frac{1}{2}$	91769,29791,76839,1927 $\frac{1}{2}$	350,79920,94087,1927 $\frac{1}{2}$	25 75
26 74	1094,75315,752	41708,73619,74479 $\frac{1}{2}$	92107,05690,79452,	337,75899,02612,8072 $\frac{1}{2}$	26 74
27 73	1052,59115,41272,743,3 $\frac{1}{2}$	42162,00339,27256 $\frac{1}{2}$	92431,69043,05390,081756	324,63352,25938,081756	27 73
28 72	1009,99344,72558,73 $\frac{1}{2}$	42597,60687,140128 $\frac{1}{2}$	92743,11656,47465,65 $\frac{1}{2}$	311,42613,42075,569038	28 72
29 71	966,97815,56214,0625	43015,39163,446676 $\frac{1}{2}$	93041,25673,65265,359375	298,14017,17799,708581	29 71
30 70	923,56294,64285,7 $\frac{1}{2}$	43415,20919,28348 $\frac{1}{2}$	93326,03573,5607 $\frac{1}{2}$	284,77900,00806,069196	30 70
31 69	879,76602,88306,77 $\frac{1}{2}$	43796,91759,789434 $\frac{1}{2}$	93597,38173,77917,026 $\frac{1}{2}$	271,34600,11845,597470	31 69
32 68	835,60564,736	44160,38147,0677 $\frac{1}{2}$	93855,22631,14752,	257,84457,36834,9733 $\frac{1}{2}$	32 68
33 67	791,10017,53303,645 $\frac{1}{2}$	44505,47202,96354 $\frac{1}{2}$	94099,50444,33696,1927 $\frac{1}{2}$	244,27813,18944,1927 $\frac{1}{2}$	33 67
34 66	746,26810,82133,33 $\frac{1}{2}$	44832,06711,703125	94330,15454,84358,3 $\frac{1}{2}$	230,65010,50662,4739 $\frac{1}{2}$	34 66
35 65	701,12805,69893,9732 $\frac{1}{2}$	45140,05122,393601 $\frac{1}{2}$	94547,11848,50202,287946 $\frac{1}{2}$	216,96393,65843,621280	35 65
36 64	655,69874,14755,5 $\frac{1}{2}$	45429,31551,384170 $\frac{1}{2}$	94750,34156,81934 $\frac{1}{2}$	203,22308,31731,934276	36 64
37 63	609,99898,36306,7212 $\frac{1}{2}$	45699,75784,488343 $\frac{1}{2}$	94939,77258,22904,010169	189,43101,40969,787947	37 63
38 62	564,04770,084	45951,28279,067212 $\frac{1}{2}$	95115,36379,26492,	175,59121,03587,989831	38 62
39 61	517,86389,91802,60 $\frac{1}{2}$	46183,80165,97395 $\frac{1}{2}$	95277,07095,65472,026 $\frac{1}{2}$	161,70716,38980,026 $\frac{1}{2}$	39 61
40 60	471,46666,66666,63	46397,23251,359375	95424,85 $\frac{1}{2}$	147,78237,67861,3072 $\frac{1}{2}$	40 60
41 59	424,87516,64832,8125	46591,50018,33854 $\frac{1}{2}$	95558,67369,37547,859375	133,82036,04214,526042	41 59
42 58	378,10863,01980,95 $\frac{1}{2}$	46766,53628,51860 $\frac{1}{2}$	95678,49832,84770,0 $\frac{1}{2}$	119,82463,47222,235863	42 58
43 57	331,1863509642,1875	46922,27923,387648 $\frac{1}{2}$	95784,29705,57957,859375	105,79872,73187,764136	43 57
44 56	284,12767,67085,7 $\frac{1}{2}$	47058,67425,56473 $\frac{1}{2}$	95876,04322,85403,4 $\frac{1}{2}$	91,74617,27445,569196	44 56
45 55	236,95200,33094,618 $\frac{1}{2}$	47175,67339,910962 $\frac{1}{2}$	95953,71374,01665,581597 $\frac{1}{2}$	77,57051,16262,153026	45 55
46 54	189,67876,77644,43 $\frac{1}{2}$	47273,23554,501731 $\frac{1}{2}$	96017,28903,00394 $\frac{1}{2}$	63,57528,98728,640625	46 54
47 53	142,32744,13498,4375	47351,32641,460061 $\frac{1}{2}$	96066,75308,79040,359375	49,46475,78646,137153	47 53
48 52	94,91752,27733,3 $\frac{1}{2}$	47409,91857,65104 $\frac{1}{2}$	96172,09345,75445 $\frac{1}{2}$	35,34036,96404,27397 $\frac{1}{2}$	48 52
49 51	47,46853,13209,598 $\frac{1}{2}$	47448,99145,237351 $\frac{1}{2}$	96223,30123,96304,287946 $\frac{1}{2}$	21,20778,20858,954613 $\frac{1}{2}$	49 51
50 00	00,	47468,53132,09598 $\frac{1}{2}$	96130,37109,375	7,06985,41195,712053 $\frac{1}{2}$	50 00

BEfore the Differences can be rightly managed, so as to determine the just Number of Figures in the result, 'twill be necessary to cut off from the end of each so many as answer its Denomination, or equal its degree of distance from the Tabular Number, viz. from the First one, from the Second two, from the Third three, from the Fourth four, &c. but if there be not so many Figures in the Difference as its degree of distance extends to, it must be deprest so far below Unity as is equivalent; *Ex. gra.* Suppose in the Tenth Difference there be only five Figures, there must be five Cyphers prefix'd thereto, which will be equivalent to the cutting off ten Figures, yet tho the first of these significant Figures stand at such a distance below 1, in the Product there will ordinarily be an Integer, which before all the Operations requir'd be compleated may amount to several more, therefore must by no means be neglected: hence, 'tis evident that two Decimals (or Supernumary Figures) at least must be admitted in the Products of the Differences, else the last Figures will ordinarily be vitiated.

To make out the true *Area* of the *Segment* from the Table or the *Tabular Number* answering to any *Versed Sine* or *Marginal Number*, given to the whole extent of the Table, i. e. to 17 Figures.

The Rule is, Collect all the Differences to the Tenth (inclusive) if that consist not of fewer than three Figures, observing, that for the 2d, 4th, 8th and 10th the half Sum of the two next on either side must be taken, which call the Mean Difference; then out of each of the foregoing Tables by a due Proportion make out the Number answering to the Figures of the *Versed Sine* given, which extend beyond those which are found in the Margin of the Table, multiply these Numbers severally by their respective Differences, then if the next Figure in the *Versed Sine* beyond those found in the Margin be less than 5, to half the second mean Difference, add the Products of the 3d, 6th, 7th and 10th Differences, and subtract those of the 4th, 5th, 8th and 9th Differences. If it exceed 5, to half the second mean Difference, add the Products of the 5th, 6th, 9th and 10th Differences, and subtract those of the 3d, 4th, 7th and 8th; half the second mean Difference thus corrected must be multiply'd by the Arithmetical Complement of the excess of the *Versed Sine* above those 4 Figures found in the Margin of the Table, and the Product added to the first Difference if those preceeding it be greater, or subtracted if (as here) they be less; the First Difference thus Corrected being multiply'd by all the rest of the Figures of the *Versed Sine* given above those found in the Margin, will yield a true proportional Part to be added to the next less Segment in the Table. The same Rule is to be observed when the other side of the Proportional Part is required, which is to be subtracted from the next greater Segment in the Table, only the half second mean Difference correct, must be multiply'd by the same Figures of the *Versed Sine* which extend beyond the Marginal, and the Product added to the First Difference here (since the next after it is greater, the proportional Part being now accounted on that side) which Sum is to be drawn into the Arithmetical Complement of the rest of the *Versed Sine*, and then subtract as proposed.

A few Instances wherein the various Parts of the Rule are Exemplified will more clearly explain and illustrate it.

Suppose the Segment comprehended within that Arch which is the twelfth part of the Semi-circle be required, $\frac{1}{12}$ of 180^d is 15^d the Co-sine of half thereof or Sine of $82\frac{1}{2}^d$ is 9914448613738104069; hence the *Versed Sine* of $7\frac{1}{2}^d$ is 0085551386261895931, half whereof (to suit it to the Tabular Diameter viz 00427756931309479655, being sought in the Table the nearest Marginal Number less is 0042, its Segment, 00046150331311835; the next greater 0043, whose Segment is, 00047806891465527; by the Differences betwixt these the true Segment may be obtained: The First Difference is 165656015369, the

ing against ,0022 is 117945708914⁵; the 2^d mean Diff. is 2728005937⁵⁵; the 3^d 641304⁶⁵⁷, &c. The Number answering the rest of the Versed Sine 410767613965 gives in the 1st Table, 1487206434, by which the third Difference 641304⁶⁵⁷ multiplied, produces 95375²⁴¹². The Number deduc'd by due Proportion from the 11^d Table, is 9,341823255, by which the fourth mean Difference 4484⁸³¹² being multiply'd, gives 41896⁵⁰⁰⁴. The Number taken from Table III, 1,667186 drawn into the fifth Difference 52,209⁶⁸ produces 87,043³. That taken from Table IV. 194,37337 multiplied by the sixth mean Difference ,860983, makes 167,352¹⁷. The Number from Table V. 24,77709 drawn into the seventh Difference ,0180614, gives 44752. That deduced from Table VI. 4249,1538 into the eighth mean Difference ,000474225 is 2,01505 : That from Table VII. 421,294 x 000014471 the ninth Difference is ,006096. That out of the VIII. 95568, x 000000.52855 the tenth mean Diff. is ,05051. To half of the second mean Difference, viz.

To	136900296,8775				
Add the Pro- ducts of the	{ 3d — 95375,2412 6th — 167,3522 7th — ,4475 10th — ,0505 + 136995839,9689	} Products of the	{ 4th 41896,5004 5th — 87,0433 8th — 2,0151 9th — ,0061 — 41985,5649	} Out of Subtract The Remainder is the half second	136995839,9689
					41985,5649
					136953854,4040
					Diff. corrected.

Multiply this $\frac{1}{2}$ second mean Difference corrected 136953854,404 by 589232386035 the Arithm. Complement of the Overplus of the Vers'd Sine; the Product 806976464,07 subtracted from the first Difference 117945708914,5 leaves 117138732450,43, which multiply'd by 41076761396494 the said Overplus, the Product 481167976315,4 added to ,00016326910153480 the Segment for ,0021 makes, ,00016808078129795,4 the true Segment answering the Versed Sine ,002141076761396494. Or half the 2^d mean Diff. correct 126953854,404 being multiply'd by 410767613965 the rest of the Versed Sine, and the Product 5625620799,68 added to the first Difference 1179457089145, and their Sum 1185082709944,68 drawn into the Arithm. Complement 58923238603506, the Product 698289112829,6 deducted out of ,00017506367242625 the Tabular Number against ,0022, leaves the Remainder ,00016808078129795,4 the Segment required, prov'd by the Series in the same Method as the former; by which it was found ,000168080781297957305, exceeding that found by the Table only 3 in the 18th Place.

The finding the Marginal Number by the Tabular, will be somewhat more troublesome and tedious, because it cannot be performed at once, as the former, but gradually by several Steps or Tentations. First, the Difference between the given Segment and the Tabular that is nearest to it, must be divided by so many Figures of the first Difference, as agree mutually with each other. By the Complement of the Quotient multiply half the second mean Difference, or only so many Figures thereof as are in the Quotient, and apply the Product, as before directed, to the first Difference: By so many Figures of it as are thereby corrected, divide again the aforesaid given Difference; by that Quotient proceed to take out the Numbers from the I, and II Tables, as near as may be, whereby the third and fourth Differences must be multiply'd, and the Products apply'd (according to the Rule) to the half second mean Difference: This being thereby in part corrected, must again be multiply'd by the Complement of the last Quotient, and the Product apply'd the same Way as before, to the first Difference; by which, thus further corrected, the Division must be renewed. By the Quotient which now may be suppos'd to consist of a competent Number of true Figures, (which will be triple, if rightly managed, to those in the first Quotient) the Numbers for the third and fourth Differences may be obtain'd more exactly, and the rest for the fifth, sixth, seventh, eighth, ninth and tenth,

tenth, taken out of the respective Tables, multiply'd, and the several Products apply'd (as the Rule directs) to the $\frac{1}{2}$ second mean Difference: Let the Multiplication and Division be repeated, and the Operation again reiterated so often, till it be found that the Repetition makes no Alteration in those Figures propos'd to be obtain'd; though when it approaches so near as within one or two Figures, a renew'd Multiplication of the half second Difference by the Complement of the Quotient last found (without any further Correction thereof only of the first Difference thereby) and a repeated Division may obtain them, and compleat the Work.

A few Examples expressive of all the Varieties may be suppos'd necessary to render this Method more clear and intelligible.

Suppose the Area of a Circle divided by Chord-lines into any Number of equal Parts, to find the Versed Sines, or Parts of the Diameter intercepted betwixt the Circumference and each Chord. Let the Area of the Circle, which in the Table is assumed = 1, be propos'd to be divided into seven equal Parts, the first or nearest the Circumference will be, 142857142857142857, the Versed Sine or Number in the Margin exactly answering thereto, is requir'd. The nearest Marginal Number against the next less Segment found in the Table, is 2004: Its Tabular Number or Segment is, 14278607926966398, which subtracted from this given, leaves 71063587478877 the Dividend or given Difference. The Tabular first Difference is 1019450062042,8; the second mean Difference is 19053888⁵⁴⁵; the third Difference = 992²⁰⁷; the fourth mean Difference = ,0556. Divide the five first Figures of the given Difference 71063⁶ by 101945 the six first Figures of the Tabular first Difference, the Quotient is 69707: By its Complement 30293 multiply $\frac{1}{2}$ the second Difference 95269, and subtract the Product 28860 out of the first Difference: By the Remainder 1019421202 divide again 7106358747 the given Difference, and by the Quotient 69709740 take out of Table I. the Number, 32849576, by which the third Difference 992²⁰⁷ multiply'd is 325²¹⁶; and out of Table II. 9,213, which drawn into the fourth mean Diff. ,0556 produces ,5122. The Sum of these Numbers 326,4482 taken out of 9526944,2725 half the second Difference, leaves 9526617,8243 the half second Difference correct: This multiply'd by 30290260 the Complement of the last Quotient is 28856373 which deducted from the first Diff. and by the Remainder 101942120567 the Division renew'd, the Quotient is 69709740276. By the Complement hereof 30290259724 multiply the $\frac{1}{2}$ second correct Difference 9526617,8243, and subtract the Product 288563728¹⁹ out of the first Diff. and by 1019421205669981 the Remainder compleat the Division of the given Difference 710635, &c. Add the Quotient 6970974027578 to the Marginal Number 2004, it becomes 20046970974027578 the true Versed Sine, consisting of as many true Figures as the Tabular Numbers. The same may with as much Certainty be obtain'd from the less Dividend 3088141872540,3 (which is the Difference of the next greater Tabular Number 14288802427586826 and the given 142857 &c.) if the Operation be prosecuted from the beginning: Wherefore it may be expedient to carry on both together, to confirm the Work all along, and prevent Mistakes. The last Part of the Operation will sufficiently show how it differs from the former. By the Quotient next before the last 69709740276 multiply half the second correct Difference 9526617,8243: The Product 664098054,24 add to 10194500620428 the first Difference, and by the Sum 10195164718482,24 divide 3088141872540,3; the Quotient 3029025972422 subtract out of the next greater Marginal Number 2005, the Remainder 20046970974027578 is the Versed Sine sought, as above, true in the 17th Figure. This will be more fully evident from the following Operation, which will illustrate the Method much better, since in the preceding only four of the Differences occur.

cur. Suppose the Table subdivided only into 500 Parts: Then the nearest less Versed Sine or Marginal Number to the Segment given 142857142857142857 would be 200; the Segment against it 14237848993264703 subtracted, leaves 478652924495827. Out of the next greater against 201 = 14339803484255519 subtract the given Segment, the Remainder 540891985412333 added to the former composes the 1st Diff. 101954490990816; the second mean Difference is 1904904287⁷⁵; the third Difference 991938,42⁶; the fourth mean Difference 556,013⁹; the fifth, 70508; the sixth mean = 30011985; the seventh, 0000029. Four Figures of the less Dividend or given Difference 47865 divided by as many of the first Tabular Difference 10195 quotes 4697: By its Complement 5303 multiply the like Number of Figures of half the second mean Difference 9524⁵, and the Product 50508 take from the first Difference: By the residue 101903983 divide again 478652924, and by the Quotient 46970973 proceed to take out of Table I. the Number 305048378, by which the third Difference multiply'd produces 50076⁸⁰: And out of Table II. 9,37118, which drawn into the fourth Difference, makes 5210⁶⁰, (both these will need Correction.) Out of Tab. III. 56771 multiply'd by the fifth Difference, gives 340029. Out of Tab. IV. 195,20419 $\times$ the sixth Difference is 23421. The Products of the third and sixth added to the half second mean Difference 952452143,875 make 952502220,91; from which subtract the Products of the fourth and fifth: The rest 952497009,91 multiply by 53029027 the Arith. Complement of the last Quotient; the Product 50509989645 deducted from the first Difference leaves 101903981001170, by which the Division of 4786529 &c. further prosecuted, yields the Quotient 46970974028. By this the Number out of Tab. I. is more truly found 30504837662, and its Product by the third Difference 50076,7875; likewise that out of Tab. II. 9,3711771, and its Product by the fourth Difference 5210,5980; whereby half the second Difference corrected to a sufficient accuracy is rendred 952497009⁸⁹⁷. This multiply'd by 53029025972 the Arith. Complement of the last Quotient, and the Product 5050998867622 taken out of the first Difference, by the Remainder 10190398100213938 divide again the given Difference 4786529 &c. the Quotient 46970974027577⁷⁹⁶ added to 200, is 20046970-974027578, agreeing with the former so nearly as sufficiently evinces its Certainty. After the same manner the Versed Sine for two Sevenths of the Area, viz. the Segment 3285714285714285714 being given, is found 328261087573670129. The Versed Sine for the three Sevenths of the Area, or the Segment 42857142857142857, is 443781453-63734041: For four Sevenths, the Complement of the last, i.e. 55621854636265959: For five Sevenths, the Complement of the former 671738912426329871: For six Sevenths, the Complement of the first 79953029025972422.

Since these falling so far distant from the Beginning of the Table, cannot sufficiently exemplifie all the Varieties that may occur in these Operations, I shall offer another Instance as near the Beginning as can easily be propos'd; wherein, though the Progress be very slow, and advances little more than two Figures at each Step, yet theteby the several Varieties are better illustrated.

Suppose the Versed Sine answering to $\frac{1}{500}$ of the Area of the Circle be required, the whole Area being 1. $\frac{1}{500}$ is = .00015873015873015⁸⁷, the nearest less Number in the Table (against 0020 in the Margin) is .00015175153776039, their Difference is 697862096976,9; the next greater (against 0021) is .00016326910153480; the Difference from this is 453894280464¹: The Sum of these 1151756377441 is the Tabular first Difference. The second mean Difference is 280450934³⁰⁵: Divide the three first Figures of the former given Difference 697, by as many of the first Difference 115, the Quotient is 606: By its Complement 394, multiply as many Figures of half the second mean

mean Difference 1402, the Product 552 subtract from the first Difference: By the Remainder 114624 renew the Division of 697862: By the Quotient 6088 take out of Table I. the Number 1813, which multiply'd by the third Difference 688762, ⁴⁵³ produces 124873, and out of Tab. II. the Number 9,3256, by which the fourth mean Diff. 5054, ⁴⁹²⁵ multiply'd makes 47136: The Sum of these two Products 17201, deducted from $\frac{1}{2}$ the second mean Difference, leaves 14005346: This being drawn into 3912 the Arith. Complement of the last Quotient, take the Product 547889 out of the first Difference, and by the Residue 114627749 repeat the Division of 697862096. By the Quotient 60880729 take the Numbers more accurately out of Table I. 1813455, which drawn into the third Difference is 124904, ¹⁵ and out of Table II. 9,32567076 x the fourth mean Difference is 47136, ⁵³²⁹; likewise out of Table III. 2,0294016, which multiply'd by the fifth Difference 61, ⁷²²⁵⁸ produces 125, ²⁵⁹⁹; Out of Table IV. 193,91678, by which the sixth mean Difference 1,068926 multiply'd will be 207, ²⁸²⁶⁹; Out of Table V. 30, ¹⁴²²¹⁴ in the seventh Difference ,0235272 is ,70916; Out of Table VI. 4237, ⁸³¹ in the eighth mean Difference ,000649845 will be 2, ⁷⁵³⁹³; Out of Table VII. 512, ²⁹⁵ x the ninth Difference ,000020653 is ,01058; Out of Table VIII. 95302, ¹⁸ x the tenth mean Difference ,0000007887 makes ,07516. Add the Products of the fifth, sixth, ninth and tenth Differences, *i. e.* 332, ⁶²⁹³ to $\frac{1}{2}$ the second mean Difference; from that Sum 140225799, ⁷⁸⁰⁹ subtract 172044, ¹⁵ the Sum of the Products of the third, fourth, seventh and eighth Differences: The Remainder 140053755, ⁶³ being the $\frac{1}{2}$ second Difference correct (tho' not so truly as it ought, seeing the Number for the third Difference is yet imperfect) multiply by the Arith. Complement of the last Quotient 39119271; the Product 547880082 subtract out of the first Difference; and by the Remainder 114627757662 divide again 697862096977. By the Quotient 6088072481 take the Number more exactly out of Tab. I. 181345414 x the third Difference is ,124904, ⁰⁹³⁵; by which with the rest, $\frac{1}{2}$ the second Difference again corrected becomes 140053755, ⁶⁹¹⁴: This drawn into 3911927518, and the Product 54788014089 taken out of the first Difference, leaves 114627757603, ²¹, whereby divide again 697862, &c. And by the Arith. Complement of the Quotient 3911927515911 multiply the $\frac{1}{2}$ second Difference correct; the Product 5478801405959 taken out of the first Difference leaves 1146277576035,04, by which the Division completed yields in the Quotient 6088072484073. This subjoyn'd to the Marginal Number,0020 gives the Versed Sine to a sufficient Accuracy,00206088072484073

The same may as truly be obtain'd by the like Approaches from the other Dividend, or given Difference 453894280464¹: To avoid Prolixity the last Operation may suffice. Multiply the $\frac{1}{2}$ second correct Diff. ,140053755, ⁶⁹¹⁴ by the Quotient 60880724840, ⁸⁹, and add the Product 8526574163, ¹⁸ to the first Diff. By the Sum 1160282951604, ¹⁸ divide 453894280464¹, and take the Quotient 3911927515927 from 0021 the nearest greater Marginal Number, the Remainder ,00206088072484073 is the Versed Sine as above, differing in Excess only an Unite in the seventeenth Place from the same obtain'd by a decimal Subdivision, being thereby found ,00206088072484071, ⁷.

For the rendring these Operations (which may possibly seem tedious and intricate enough) more clear and easy, I shall propose another Instance or two in the Nature of Problems.

Suppose a Cylindrical Vessel or Cask contains 139 Gallons, the Axis being plac'd Horizontal, What shall be the Versed Sine or dry part of the Diameter upon the Vacuity of one Gallon, so much only being drawn out? $\frac{1}{139}$ th part of the Content, or, (which in this Case is the same) of the Area of the Circle being every where suppos'd = 1, is ,0071942446-04316547: The nearest less Segment in the Table is ,00718333161604722 against ,0263, the Diff. 1091298826932, ⁷; the nearest greater against ,0264 is ,00722411955770595

the Diff. 2987495338940,³ : This added to the former gives the Tabular first Difference 4078794165873, by four or five Figures of which 10913 — divided gives the first Quotient 2676. By its Arith. Complement 7324 multiply so many Figures of the half second mean Difference 37651037,⁴⁴⁶ the Product 275756 deduct out of the first Difference, and by the Remainder 407603660 divide 1091298827 : By the Quotient 267735288 take out of Tab. I. 38710785, which multiply'd by 15492,⁰⁰⁹ the third Difference, makes 5997,⁰⁷⁸² ; Out of Tab. II. 9,15022126, which drawn into 8,5806 the fourth mean Difference is 78,⁵¹⁴¹ ; Out of Tab. III. 4,³⁵ × ,00810 the fifth Difference is ,0344. To half the second mean Diff. add the Product of the third 5997,⁰⁷⁸², from the Sum 37657034,⁵²⁴ subtract the Products of the fourth and fifth 78,⁵¹⁴¹ ; the Remainder 37656955,⁹⁷⁶ multiply by 732264712 the Arith. Complement of the last Quotient, and subtract the Product 2757486002 from the first Difference. By the rest 4076036679871 renew the Division of 10912988, &c. and the Quotient is 267735281265 ; by its Arith. Complement 732264718735 multiply half the second Difference last corrected ; the Product 27574860276 take out of the first Difference ; by the Residue 40760366798454 the Division being perfected renders the Quotient 2677352812669², which added to the Marginal Number 0263, gives 02632677352812669² the Versed Sine to as many Figures as our Table consists of.

But since in this Operation there are only five Differences ingredient, which do but exemplify half the Varieties that may occur : I shall (to prove the Truth of this Versed Sine) compute it from the Segments for 026 and 027, supposing the Table subdivided only into 500 Parts. The Segment against 026 = ,00706142069227974 subtracted from that given 00719424460431654⁷ leaves 132823912036807, and that given from ,00747042156170274 which stands against 027, leaves 27617695738619,³. The Sum of these two is the first Tabular Difference 40900086942300. By 409 divide 2762 —, by the Quotient 675 multiply half the second mean Diff. 3754405984,²¹ the Product 25342 take from the first Difference, and by the Remainder 4064667 divide 13282391 : With the Quotient 326769 take out of Tab. I. 288718, multiply it by the third Diff. 15374049,⁰⁹² it produces 4438760 ; Out of Tab. II. 9,249 drawn into the fourth mean Difference 84905,⁹¹⁶⁴⁵ is 785300 ; Out of Tab. III. 3,2046 × 797,⁹⁶⁴⁷ the fifth Difference makes 2557 ; out of Tab. IV. 191,78 × 10,⁶⁰⁶⁵³⁶⁵ the sixth mean Difference is 2034. To $\frac{1}{2}$ the second mean Diff. add the Products of the third and sixth ; from the Sum 3758846782 deduct the Products of the fourth and fifth, the rest 375805886 multiply by the Arith. Complement of the last Quotient 673231 ; the Result 25300417 take from the first Diff. With the rest 4064708277 divide 1328239120, and by the Quotient 32677354 rectify the Numbers for the third and fourth Differences (which will yet need another Correction) the former will be found 28871077, its Product 4438653,⁶ ; the latter 9,24996914, and its Product 785377,¹⁴⁹⁷ : These, together with the Products of the fifth and sixth Differences, apply as above to $\frac{1}{2}$ the second Diff. and it will be (better corrected) 3758058737,⁵ : Multiply it by 67322646 the Arith. Complement of the last Quotient, and deduct the Product 253002458 out of the first Difference : By the Remainder 40647084484 again divide 1328239120368, and by the Quotient 3267735281 perfect the Numbers for the third and all the other Differences : And the Work will stand thus.

To $\frac{1}{2}$ the second mean Diff. 3754405984, ²¹			
Add the	3 ^d × 288710786458 = 4438653,8044	Subtr. the	5 th × 9,2499691227 = 785377,1055
	6 th × 191,782464 = 2034,1477		8 th = 797,96427 × 3,204679355 = 2557,2196
	7 th = 1801859 × 47,45972 = 8,5516		9 th = ,00380152 × 4184,964 = 15,9092
	10 th = 0000027127 × 94021, = ,2551		9 th = ,000093348 × 805,5 = 0,0752
Sum 3758846680,9688		Sum 787950,3095	

From this first Sum 3758846680,9688 having Subtracted 787950,3095, multiply the Remainder

mainder 3758058730,6593 by the Arith. Complement of the last Quotient 6732264719, the Product 25300246203371 take out of the first Diff. By the rest 406470844802,661 finish the Division of 1328 &c. The Quotient 32677352812670,1 added to ,026, gives the Vers'd Sine ,02632677352812670,1, differing from the former but a Unice in the seven-teenth Place.

To render this Method as easy and clear as possible, I shall superadd the Results of another Example, waving all the gradual Approaches (to avoid Tedioufness) being in the former sufficiently particulariz'd. Supposing the whole Capacity of the Cylindrical Cask 143½ Gallons, and One only wanting, What will be the Versed Sine, or the dry part of the Diameter? $\frac{1}{143\frac{1}{2}}$ or $\frac{1}{287}$ th of the Area (= 1) is ,00696864111498257,8: Out of this deduct ,00694019241934193 the nearest less Segment, answering to ,0257 the Versed Sine in the Margin, and there remains 28448695640648 the Dividend.

To half the second mean Diff. 38123670,955	}	Subtr. 3 ^d Diff. = 16021,814 × 343560517 = 5488,4401	
Add the 5 th Diff. = 00878 × 3,808 = ,0334	{	the 4 th mean Diff. 90867 × 9,1989784 = 83,5884	
6 th mean Diff. ,000238 × 190,28 = ,0045	{		
Sum		Sum	
<u>38123670,9929</u>		<u>5572 0285</u>	

From this first Sum 38123670,9929 Subtract 5572,0285, and multiply the Remainder 38118098,9644 by 2944636895 the Arith. Complement of the Quotient suppos'd to be already obtain'd by former Approaches: The Product 11224396058 deduct from 40333-31018437 the first Diff. By the rest 40322085788312 divide 28448695640648, the Quo- tient 705536310547068 subjoin'd to 0257, makes the Versed Sine 02577055363105470,7.

For the Confirmation hereof, and the more ample Illustration of the Certainty of this Method, I shall show that the same is attainable by the Segments for 025 and 026 and their Differences.

From the given Segment 006968641114982578 take that for ,025 = 0066600055-0507062, the rest 30863560991195,8 is the Dividend.

To half the second mean Difference	=	3833498623,115
Add the {	5 th = 913,03893 × 4,9078447 = 4481,0533	
	6 th mean = 12,6218085 × 186,745338 = 2357,0639	
	9 th = ,000124955 × 1220,65 = ,1533	
	10 th mean = ,00000379605 × 91075,6 = ,3483	
Sum		<u>3833505461,7338</u>

Subtract the {	3 ^d = 16263006,470 × ,450922718425 = 7333359,0872	
	4 th mean = 93460,93245 × 9070030509 = 847690,9407	
	7 th = ,2228685 × 72,176634 = 16,0859	
	8 th mean = ,004893035 × 4060,616 = 19,8687	
Sum		<u>8181085,9825</u>

Out of the first Sum 3833505461,7338 Subtract the latter 8181085,9825, the Remainder 3825324375,7513 multiply by 2294463689453 the Arith. Complement of the Quotient obtain'd before by Approaches, the Product 877706788054 take from the first Difference 40141518720912; by the Remainder 400537480421066 divide 30863560991195,8, the Quotient

Quotient 77055363105471,³, subjoyn'd to 025, renders it 02577055363105471,³ the Versed Sine, exceeding the former only half an Unite in the seventeenth Place.

The preceding Rules are applicable, in the very same Order (as has been directed and exemplify'd) to the Logarithms, and to all other Tables where the Diff. decrease; but where they increase, as in the Tables of Natural Tangents, Secants and Powers, &c. the Products of the Numbers and Differences are to be apply'd in the same Order to the half second mean Difference, when the rest of the Marginal Number is Less or Greater than 5, as they are in the former when 'tis Greater or Less than 5.

But in the Tables of Natural and Versed Sines, and all other whose Differences increase and decrease alternately, when the next figure succeeding the last found in the Margin of the Table is less than 5, if the first Differences decrease, all the Products of the odd Differences, viz. the third, fifth, seventh, and ninth must be subtracted from half the second mean Difference, and all those of the even Differences, viz. fourth, sixth, eighth, tenth must be added; but if it exceed 5, all are to be added. The contrary will obtain when the first Differences encrease.

Hence 'tis obvious, that by the help of these Tables, a Method of Decimal Interpolation is offer'd. (perhaps) as commodious as any other, and (probably) less intricate, but so accurate, that if the eleventh Difference consists not of more than 50000, the Result will scarce differ an Unite in the last Figure from the Truth; *Ex. gr.* Suppose the Space betwixt the Segments 0250 and 0260 be to be divided into ten Parts: To avoid Tedioufness I shall only instance in finding the third and seventh Parts, which require most Trouble, the rest being made with more Facility by the same Method.

To half the second mean Difference =		3833498623,115
Add the	{ 3 ^d = 16263006,470 × $\frac{1}{3}$ =	5421002,1567
	6 th mean = 12,621808 $\frac{1}{2}$ × 190,6125 =	2405,8747
	7 th = 2228685 $\frac{1}{2}$ × 54,4607 $\frac{1}{2}$ =	12,1376
	10 th mean = ,0000037958 $\frac{1}{4}$ × 93326,035 =	,3543
Sum		3838922043,6383

Subtract the	{ 4 th mean = 93460,9324 $\frac{3}{4}$ × 9,208 $\frac{1}{2}$ =	860619,4196
	5 th = 913,03893 × 3,68 $\frac{1}{2}$ =	3363,0267
	8 th mean = 00489305 × 4156,03326 =	20,3357
	9 th = ,000124951 × 923,56295 =	,1154
Sum		864002,8974

From the first Sum 3838922043,⁶³⁸³ Subtract 864002,8974, the Remainder being half the second Difference correct 3838058040,⁷⁴⁰⁹ multiply'd by 7 = 26866406285,¹⁸⁶³ subtract from 4014151872091,³ the first Difference: The rest 3987285465806,⁰¹⁴ × 3 = 11961-856397418,⁰⁴² added to ,00666000550507062 the Segment for 0250, makes ,0067796-2406904480,⁰⁴ the Segment for 0253. Or half the second correct Diff. 3838058040,⁷⁴⁰⁹ × 3 = 11514174122,²²³ added to 401415 &c. the first Difference, and the Sum 40256-66046213,⁴²³ × 7 = 28179662323493,⁹⁶ subtracted from 00706142069227974 the Segment for 0260, leaves 00677962406904480⁰⁴ the Segment for 0253 as above.

Again

Again for .0257

To half the second mean Difference		3833498623,115
Add the	5 th =	913,03893 × 3,68 $\frac{1}{2}$ = 3363,0267
	6 th mean =	12,621808 $\frac{1}{2}$ × 190,6125 = 2405,8747
	9 th =	,000124951 × 923,56295 = ,1154
	10 th mean =	,000003795875 × 93326,035 = 3543
Sum		3833504392,4861

Subtract the	3 ^d =	16263006,470 × $\frac{1}{3}$ = 5421002,1567
	4 th mean =	93460,93245 × 9,208 $\frac{1}{2}$ = 860619,4196
	7 th =	,22286855 × 54,4607 $\frac{1}{2}$ = 12,1376
	8 th mean =	,00489305 × 4156,03326 = 20,3357
Sum		6281654,0496

Out of the Sum 3833504392,4861 subtract the third, fourth, seventh and eighth Products = 6281654,0496: The Residue 382722738,4365 (the half second correct Diff.) × 3 = 11481668215,³¹ deduct from 40141518720912 the first Difference, the Remainder 40026702038758,² × 7 = 28018691427131,³³ added to ,00666000550507062 the Segment for 0250 gives ,00694019241934193,² the Segment for 0257. Or half the second Difference correct × 7 = 26790559169,0555 added to the first Difference, and the Sum 40409424312602,³⁵ × 3 = 121228272937807,⁶⁵ taken out of ,00706142069227974 the Segment for 0260, leaves ,00694019241934193,² the Segment for 0257 true in the seventeenth Place.

Hereby also not only Bisection and Quinquesection, but likewise Quinquagesimal, Centesimal, Millefimal, &c. Interpolations may be perform'd with as much, or possibly more Conveniency and Accuracy than by any other Method, but the last Instances sufficiently explain and are expressive of all the Varieties of the Rule.

But to give a more full and satisfactory Evidence of the singular Advantage that may be made of this Method depending upon these eight short Tables, I have (at the Conclusion) given a Specimen of their Application to the composing of Logarithms, which renders it evident, that hereby, together with the Assistance of a short Table of Logarithms annex'd to the end of the Tables, 'tis possible to make out the Logarithm to any Natural Number propos'd, or to find the Natural Number for any Logarithm given, to the utmost Extent of that Table, *i. e.* to sixty-one Figures, with as much Ease and Conveniency (perhaps) as by any other Method.

The common Uses to which these Tables of Segments are ordinarily apply'd, being comprehended in those already exemplify'd, need not be any further insist'd on: I shall therefore specify some more uncommon, wherein the Usefulness of the Table of Segments will more eminently appear, particularly such as relate to the finding the Solidity of the primary Sections of an Erect Cone.

PROBLEM I.

Let the Cone ABD Fig. 1. be cut thro' the Vertex A by the Plane HAG, and thro' the Base in the Chord Line HG, limiting the Segment HDG, which is the Base of the inclining Pyramid HGAD. That it is no other than a Pyramid is evident; for the Base HDG is

G

is

is a Plane (*per Hypothesis*) so also is HGA, which, together with an infinite Number of narrow Planes of Triangles whose sides constitute the Circular part of the Superficies, do meet in a Point in the Vertex A (which is the proper Definition of a Pyramid (*Def. 12. e XI.*) The perpendicular or Altitude of this Pyramid AC is the same with the Axis of the Cone, therefore (*per 6 and 7 e XII*) $\frac{1}{3}$ AC the Altitude into the Base, *i. e.* the Circles Segment HDG, will be = the Solidity of the Cone's Section HGAD. Let the Diameter of the Circle which is the Cone's Base BD = RS be 38,5 = d , its Altitude or Axis AC = 91 = p , and the Vers'd Sine DE = 14,7 = c : Then $\frac{c}{d} = \frac{14,7}{38,5} = \frac{1}{2,62}$ = 381818181818182 the Tabular Versed Sine: The Segment answering thereto taken out of the Table by a due Proportion is ,35093932354170010, = S , which multiply'd by the Area of the Circle or Cone's Base = 1164,156427695867757 = ddn , and the Product 408,548269232309936 by $\frac{1}{3}$ AC the Altitude = $\frac{2}{3}$ makes 12392,63083338006806 = $\frac{pddnS}{3}$ the Solidity of the Section HGAD. Note, the Number ,78539816339744831 is put = n , being the Area of the Circle whose Diameter is 1.

P R O B L E M II.

Suppose the Cone again cut by the Plane HGI parallel to the Side BA: Then will the Section HGIA be (as is evident *per Problem I.*) a reclining Pyramid, its Base HGI is a Parabola, its Altitude AK = EV; BE = BD — DE = $d - c = 23,8$; HE² or EG² = BE $\times$ ED = $dc - cc = 349,86$, and the Chord HG = $2\sqrt{dc - cc} = 37,4090898044846849$. In the Similar Triangles BDA, EDI; BD : BA :: ED : EI, whence EI = $\frac{c}{d} \times BA$, consequently the Area of the Parabola HGI, being = $\frac{1}{3}$ EI $\times$ HG, is = BA $\times \frac{4c}{3d} \sqrt{dc - cc}$: In the Similar Triangles BCA, BEV; BA : AC :: BE : EV = $\frac{pd - pc}{BA} = AK$ the Pyramids Altitude, therefore (*per 6 and 7 e XII*) the Solidity of the Parabolic Pyramid HGIAG is = $\frac{1}{3}$ AK $\times$ the Area of the Parabola HGI = $\frac{4pdc - 4pcc}{9d} \sqrt{dc - cc} = \frac{4p}{9d} \times GE^3$.

P R O B L E M III.

Out of the Conical Pyramid HGDA = $\frac{pddnS}{3}$ take the Parabolic Pyramid HGAI = $\frac{4pdc - 4pcc}{9d} \sqrt{dc - cc}$, there will remain $\frac{pddnS}{3} - \frac{4pdc - 4pcc}{9d} \sqrt{dc - cc}$ = the Parabolic Segment HGIDH = $d^2nS - \frac{4}{3}c + \frac{4cc}{3d} \sqrt{dc - cc} \times \frac{1}{3}p = \frac{2}{3} \times 408,548269232309936 - 226,631067688259946 = 5518,15511350284973$.

Tho' it might have been excusable to have expatiated to a far greater length in the Demonstration and Illustration of these uncommon Problems (having a different Demonstration at hand, perhaps more clear, however more copious and prolix, and requiring more Schemes to explain it) I judg'd this, as more short and concise, to be the more eligible, and (I doubt not) more acceptable to the Judicious, and shall therefore proceed upon the same Principles: But before I enter upon other Problems, it may not be improper to accommodate the preceding to ordinary Practice, which will be a more ample Illustration thereof.

Suppose

Suppose BOXD (the *Truncus* or *Fruſtum* of the Cone ABD) a Conical Veſſel or Caſk, whoſe Length $rX = tO = CF = 32,7 = p$, the greater Diameter $BD = 38,5 = d$, the leſs $OX = 29,7 = f$; then $Dr = CD - Cr (= FX) = \frac{d-f}{2}$; In the ſimilar Triangles DrX, DCA ; $Dr : rX :: DC : CA = \frac{pd}{d-f} = \frac{1258,95}{8,8} = 143,0625 =$ the Axis of the Cone :

Suppoſe BO the lower ſide of the Caſk plac'd Horizontal, DE the greateſt Depth of Vacuity or Verſ'd Sine $= 14,7 = c$: Then the Area of the Segment HGD will be (as before *Prob. 1.*) $= 408,548269232309936 = ddnS$, and all the reſt (except the Cone's Axis) the

ſame, conſequently the Parabolic Section or *Cuneus* HGIDH $= ddnS - \frac{4}{3}c + \frac{4cc}{3d}\sqrt{dc} - cc$

$\times \frac{pd}{3d-3f} = 181,91720154404999 \times \left(\frac{143,0625}{3}\right) = 47,6875 = 8675,176548631883898.$

To find the leſs *Cuneus* Inq XI: $Dr = El$, therefore $lr = bX = ED - 2Dr = c - d + f = 5,9$ the Verſ'd Sine or leaſt Depth of the Vacuity call it S. $\frac{c-d+f}{f} = \frac{5,9}{29,7} = ,1986-$

$-5319865319865,3$ the Tabular Verſ'd Sine: The Segment anſwering it is $,141008385525-$

$-41904 = x$, which being reduc'd to its proper Diameter or multiply'd by ffn is $= 97,689-$

$-462522929017 = ffnx$. $Dr : rX :: XF : FA = \frac{pf}{d-f}$ the Axis $= 110,3625$, hence

the Solidity of the Parabolic *Cuneus* Inq XI will be $= ffnx - \frac{4}{3}S + \frac{4SS}{3f}\sqrt{fS} - SS$

$\times \frac{pf}{3d-3f} = 97,6894625229017 - 6,30392817059483726 \times 11,849894514984289 \times 36,7875$

$= 845,69233803106018$; which ſubtracted from HGIDH $= 8675,17654863188390$ leaves $Xuq HGD = 7829,48421060082372$, the true Vacuity. If the greater part $q uGHBO$, viz. the Quantity contain'd, be requir'd immediately; then let the greater Segment HGB $= ,64906067645829989,8$ be term'd Z, which reduc'd to its proper Diameter will be $ddnZ = 755,6081584635578208$: Then will the greater part of the Cone BHGIAB be

$= ddnZ + \frac{4}{3}c - \frac{4cc}{3d}\sqrt{dc} - cc \times \frac{pd}{3d-3f} = 982,239226151817766 \times 47,6875 = 46840,-$

-5330971148097 : The Segment $Ouq = ,85899161447458096$ put $= z$, which reduc'd and drawn into ffn is $595,102403428326198$; then will the greater part $Ouq IAO$ be $=$

$= ffnz + \frac{4}{3}S - \frac{4SS}{3f}\sqrt{fS} - SS \times \frac{pf}{3d-3f} = 669,803287275589255 \times 36,7875 =$

$24640,38843065073973$, which deducted from BHGIAB $= 46840,53309711480975$ leaves $BOuq HG = 22200,14466646407002$ the Quantity contain'd or remaining.

PROBLEM IV.

Suppoſe the Cone ABD *Fig. 1.* cut by a Plane paſſing thro' the Vertex A and the Baſe in the Chord Line MN, and again cut by another Plane MNP parallel to the Axis CA;

Let BL $= 6,2$ the Verſ'd Sine be $= c$, $\frac{c}{d} = \frac{6,2}{38,5} = ,16103896103896104$ is the Tabular

Verſed Sine; the Segment ſuited to it is $,10424666872320591 = S$, which reduc'd to that Diameter, i. e. drawn into ddn , will be $ddnS = 121,359429460001939$, which multiply'd

multiply'd by $\frac{1}{3}$ CA the Altitude = $\frac{2}{3}$ becomes 3681,236026953392159 = $\frac{1}{3}$ pddnS (per Prob. 1.) = the Conical inclining Pyramid BAMNB: The Base MNP of the reclining Pyramid PMNAP is an *Hyperbola*, its Altitude TA = LC = $\frac{1}{2}$ d - c is 13,05; for Brevity put it = b; the Chord MN = $2\sqrt{BL \times LD} = 2\sqrt{dc - cc} = \sqrt{801,04} = 283026500$ - 52601081476 = g: In the Similar Triangles BCA, BLP; BC : CA :: BL : LP = $\frac{2pc}{d} = \frac{11334}{1110} = 29,3090909090909$. To find the Area of the Hyperbola MNP, in Fig. 2. (being of the same Dimensions) AB, AD are the *Asymptotes* = the Sides of the Cone, MN the Ordinate = g, AP the transverse Semidiameter = TP = p - $\frac{2pc}{d}$, PY = LC = b the Semiconjugate, LB = LD the Semiordinate extended to the *Asymptotes* = BC = $\frac{1}{2}$ d; Let the Logarithm of $\frac{d+g}{2b} = 2,5594885077624935$ taken out of Briggs's Tables (or those at the latter end, by the Method herein prescrib'd) = ,4081531838856-63049 = l, be multiply'd by 2,30258509299404568 = L the natural Logarithm of 10; The Product Ll = ,93980743687318528 drawn into $\frac{2PY^2 \times AL}{BD} = \frac{2bpg}{d} = 805,066$ - 363636 &c. and that Product 756,607355721906644 subtracted from AL x LM, i. e. half pg = 1287,770577393349207, the Remainder $\frac{1}{2} pg - \frac{2pbbLl}{d} = 531,163221671442563$ is the Area of the Hyperbola MNP = the Base of the reclining Pyramid MNPAM. The Demonstration hereof would be too tedious, and not so proper for this Place, it being the Reverse of *Mercators* (or rather of a more general) Quadrature of the *Hyperbola*, illustrated by Dr. Wallis's *Philos. Transf.* N^o 38. This Base MNP = $\frac{1}{2} pg - \frac{2pbbLl}{d}$ drawn into $\frac{1}{3}$ of the Altitude TA = LC, i. e. $\frac{1}{3} b = 4,35$, produces (per Problem 2.) $\frac{1}{3} pbg - \frac{2pbb^3Ll}{3d}$ or $\frac{1}{3} pb \times \frac{1}{3} g - \frac{2pbbLl}{d} = 2310,5600142707751$ = the Solidity of the Hyperbolic Pyramid MNPAM. Deduct this (per Prob. 3.) from the Conical Pyramid BAMNB = 3681,236026953392159 = $\frac{1}{3}$ pddnS, the Remainder 1370,6760126826170 = $\frac{1}{3} p \times ddnS - \frac{1}{3} bg + \frac{2b^3Ll}{d}$ is the Solidity of the Hyperbolic *Cuneus* BMNPB. For the better Illustration of this Problem, and the rendring it more practicable, suppose a Cask BDOX the *Frustrum* of a Cone, whose Length Or = CF is 32,7 = p, the Diameter of the greater End or Head BD = 38,5 = d, of the less OX = 29,7 = f: Supposing the Axis CF plac'd horizontal, LD is the greatest Depth of the Liquor, BL of the Vacuity = c = 6,2 the Vers'd Sine, the Segment and the rest the same as above, only the Axis of the Cone CA (as in Prob. 3. latter Ex.) = $\frac{pd}{d-f} = 143,0625$. Hence the Hyperbolic *Cuneus* BMNPB = $\frac{pd}{3d-3f} \times ddnS - \frac{1}{3} bg + \frac{2b^3Ll}{d} = 47,6875 \times 45,187121297229132 = 2154,8608468616142$. For the less *Cuneus* OaeP, BC - tC (i. e.) OF) = Bt = $\frac{1}{2} d + \frac{1}{2} f = 4,4$, and BL - Bt = tL = OW = c, $\frac{1}{2} d + \frac{1}{2} f = 1,8$ the Vers'd Sine or least

least Depth of the Vacuity, $\frac{e - \frac{1}{2}d + \frac{1}{2}f}{f} = \frac{110,3625}{3} = ,06060606$ &c. the Tabular Vers'd Sine, whence the Segment $f = ,02486364765609778$, which reduc'd to its proper Diameter, i. e. drawn into ffn becomes $17,225332854022532,6 = ffnf$, this multiply'd by $\frac{1}{3}$ of the Axis $FA = \frac{pf}{3d-3f} = \frac{110,3625}{3} = 36,7875$, is the Conical Pyramid $OaeAO = \frac{pfffnf}{3d-3f} = 633,676932367353919$. The Chord $ae = 2\sqrt{OW \times WX} = 2\sqrt{dc + \frac{1}{4}ff - cc - \frac{1}{4}dd} = 2\sqrt{50,22} = 14,1732141732212598 = q$: Put the Sine $WF = LC = \frac{1}{2}d - c = b$ as before, and the Logarithm of $\frac{f+q}{2b}$, i. e. of $1,6809660602766766$ multiply'd by $2,30258$ &c. is $Ll = ,519368664024365015$, then will the Area of the Hyperbola $Pae = \frac{1}{2}q - \frac{2b^3Ll}{f} \times \frac{pf}{d-f} = 124,752977256563796$ be the Base, which drawn into $\frac{1}{3}b$ the Altitude $= 4,35$ becomes $\frac{1}{3}bq - \frac{2b^3Ll}{f} \times \frac{pf}{3d-3f} = 542,675451066052513$ the Hyperbolic Pyramid $PaeAP$, which taken from the Conical Pyramid $OaeAO$ equal to $\frac{pfffnf}{3d-3f} = 633,676932367353919$, there remains $\frac{pf}{3d-3f} \times ffnf - \frac{1}{3}bq + \frac{2b^3Ll}{f} = 91,001481301301406$ the Hyperbolic Cuneus $PaeOP$, and this deducted from the greater Cuneus $PMNBP$, leaves the Truncus $BMNaEOB$ equal to $2063,8593655603128$, being the whole Vacuity or empty part of the Cask $= \frac{pd}{3d-3f} \times ddns - \frac{1}{3}bg + \frac{2b^3Ll}{d} - \frac{pf}{3d-3f} \times ffnf - \frac{1}{3}bq + \frac{2b^3Ll}{f} = \frac{p}{3d-3f} \times d^3ns - \frac{1}{3}bdg + 2b^3Ll - f^3nf + \frac{1}{3}bfq - 2b^3Ll$. By this Theorem the Result may be immediately obtain'd without making out several of the constitutive Parts before particulariz'd.

If the greater Part $DXaeNMD$, in this Case the Quantity of Liquor remaining, be immediately requir'd, let the greater Segment $MND = ,89575333127679409$ be $= Z$, which reduc'd to its proper Diameter is $ddnZ = 1042,796998235865817$, then will the greater part of the Cone $MNPADM$ be $= \frac{pd}{3d-3f} \times ddnZ + \frac{1}{3}bg - \frac{2b^3Ll}{d} = 53360,8487988850794$: In the less Circle OX , let the greater Segment $aeX = ,97513635234390222$ be $= z$, reduc'd 'tis $675,5665330972226468 = ffnz$. Hence the greater part $PaeXAP$ is $\frac{pf}{3d-3f} \times ffnz + \frac{1}{3}bq - \frac{2b^3Ll}{f} = 25395,079287380498507$: This taken from the former $MNPADM$ leaves the greater part of the Frustum $DXaeMDN$ or the Quantity remaining $\frac{p}{3d-3f} \times d^3nZ + \frac{1}{3}dbg - 2b^3Ll - f^3nz - \frac{1}{3}bfq + 2b^3Ll = 27965,7695115045808$.

But since this Problem may possibly be of considerable Use in gauging of a Conical Cask, I have computed a Table (which immediately follows that of the Segments) for the more expeditious Solution hereof. It consists only of 500 Numbers, which are sufficient for this Purpose, since being compriz'd within the narrow Limits of $\frac{2}{3}$ and $\frac{1}{3}$, a more minute Subdivision might seem superfluous: It may be easily conceiv'd how operose and tedious a Task the composing this Table must necessarily be, since every Number calculated was the Quotient obtain'd from the Result of the whole preceding Operation, as the Dividend; and the Product of the Cone's Axis, the Vers'd Sine, and the Segment reduc'd divided by the Semidiameter of the Base, as the Divisor. The calculating every Tenth to 300, every Fifth from thence to 440, every Second from that to 470, and every single Number thence to the end was unavoidable. The Intermediate were obtain'd by Interpolation. In the Use of the Table the proportional part is found in the same manner as in the Table of Segments, only the Correction deduc'd from the inferiour Differences is to be apply'd to half the Second mean Difference the contrary way, since the Differences here increase, viz. when the remaining part of the Vers'd Sine or Marginal Number is less than 5, the Products of the third, fourth, seventh and eighth must be subtracted, the rest added, &c. Let the first Example in *Prob. 4.* be admitted, where the Vers'd Sine is $\frac{62}{111} = .56123$, with which enter the Table, the Number next less answering 161 is .38535720943960953. To half the second mean Difference 91406768, ⁵³⁰²⁵ add the Fifth = .01673 $\times$ 7,8278 = .13098. From the Sum 914-06768, ⁶¹²³ subtract the Sum of the Third = 55563, ⁸⁶⁶³ $\times$.768398268 = 42695, ¹⁷⁸⁶ and of the Fourth 25,66007 $\times$ 8, ⁴⁸⁹³⁴⁶ = 217,8373. The Remainder 91363855, ⁶⁴⁵³ the half second Difference correct, multiply'd by 961038961039 the Arith. Complement of the rest of the Vers'd Sine, and the Product 8780422490, ⁶ subtracted from the first Diff. 10370844442413 leaves 10362064019922, ⁴: This drawn into 03896103896104 the Residue of the Vers'd Sine, produces 403716779997 the true proportional part, which deducted from .38535720943960953, the Tabular Number against 161, leaves .385353-17227180956 the true Tabular Number required, which call T. Multiply this by the Product of the Axis of the Hyperbola = $\frac{2pc}{d} = \frac{2224}{1110}$, or $\frac{1612}{111}$, and of the Segment reduc'd 121,359429460001939, i. e. $2pc d^2 n S = 3556,93455071860228$: The Result will be 1370,67601268261709 the Solidity of the Hyperbolic Cuneus BMNPB = $2pc d n ST$, not exceeding that found by the other Operation an Unite in the seventeenth Figure.

In the second Case where the Axis of the Cone is $\frac{pd}{d-f} = 143,0625$: The same Number .38535317227180956 = T drawn into 5591,9115292547257 = $\frac{2pc d d d n S}{d-f}$ produces 2154,86084686161435 = $\frac{2pc d d d d n ST}{d-f}$, exceeding that got by the former Operation but 1 $\frac{1}{2}$ in the seventeenth Place. In the next Case, where the Diameter OX is 29,7, and the Vers'd Sine $\frac{18}{127} = .060606$ &c. the Number thereby taken out of the Table by a due Proportion is .39492375498608506 = T, which multiply'd by the Product of double the Axis FA 220,725 into the Vers'd Sine $c = .06060606$ &c. into the Segment reduc'd 17,2253328540225326, which will be $\frac{2pc f f f n f}{d-f} = 230,42795406310515$, produces $\frac{2pc f f f n f T}{d-f} = 91,001481301301407$, greater by an Unite in the 17th Figure.

To illustrate both these Operations more effectually, I shall propose another Instance very near the latter end of the Table. Suppose the Cone Fig. 1. the same in all its Dimensions but the part of the Diameter of the Base BL (cut off by the Plane MNP parallel to the Axis) = 18,74 = c , the Tabular Vers'd Sine $\frac{c}{d} = \frac{18,74}{100} = ,486753246753$ - 24675; hence the Tabular Segment is found $,48313568322605607 = S$, reduc'd 'tis $562,44551107684781,411 = d d n S$; $2\sqrt{dc} - cc = 38,4864859398724528 = g$, and $\frac{d+g}{d-g}$ or $\frac{d+g}{2b} = 75,4769469998749538$, the Natural Logarithm whereof is $4,32382$ - 727187991645 = Ll ; $\frac{2b^3 Ll}{d} = ,02979532526972170$; and half $bg = 9,8140539$ - 1466747547; and $d d n S + \frac{2b^3 Ll}{d} - \frac{1}{2}bg = 552,66125248745006046 \times \frac{1}{2}p = 47$ - 6875 is = $26355,0334779952747$ = the Solidity of the Hyperbolic *Cuneus* BMNPB.

In the Operation by the Table, the most considerable part of the Labour is the proportioning the Number, which requires to be a little infilted on, with as much Conciseness and Brevity as the Matter will admit.

To half the second mean Difference		460971277,8425
Add the	$\begin{cases} 3^d = 1207577,213 \times 42207792208 \\ 6^{th} \text{ mean} = ,7620935 \times 187,79826 \\ 7^{th} = ,0176181 \times 67,94185 \\ 10^{th} \text{ mean} = ,0000010270 \times 91656,73 \end{cases}$	$\begin{aligned} &= 509691,6809 \\ &= 143,1198 \\ &= 1,1970 \\ &= ,0941 \end{aligned}$
	Sum	461481113,9343
Subtract the	$\begin{cases} 4^{th} \text{ mean} = 4990,77025 \times 9,107775342 \\ 5^{th} = 46,94717 \times 4,613029 \\ 8^{th} \text{ mean} = ,000556365 \times 4086,5794 \\ 9^{th} = ,000021169 \times 1149,915 \end{cases}$	$\begin{aligned} &= 45454,8142 \\ &= 216,5687 \\ &= 2,2737 \\ &= ,0243 \end{aligned}$
	Sum	45673,6809

Out of the first Sum 461481113,9343 Subtract the latter 45673,6809: The rest 461435 - 440,2534 (which is the half second Difference correct) multiply'd by 2467532467532 the Arith. Complement of the Tabular Vers'd Sine: The Product 1138606930,5 deducted from 2283692522590, the first Difference; and the Residue 2282553915659,6 drawn into 753246753246753 the rest of the Vers'd Sine: The Product 17193263260812, subtracted from 33662032269912756 the Number in the Table against 486, leaves 33644839006651943, the Number requir'd answering to the Vers'd Sine ,4867532467 - 5324675: Which may be otherwise obtain'd, if the half second correct Difference be drawn into 7532467 &c. the rest of the Vers'd Sine; and the *Factus* 3475747472, added to the first Difference, and the Sum 2287168270062, multiply'd by the Arith. Complement 246753 &c. The Product 5643661965088, added to 33639195344686855 the Number against 487, makes 33644839006651943, exactly the same as above = T. This multiply'd by ($2pc = 5361,9875 \times d n S 14,6089743136843588$) = 78333,0646 - 129250425 produces $2pc d n S T = 26355,0334779952745$ the Hyperbolic *Cuneus*, less by 2 than the former in the eighteenth Figure.

The

The Preceding Problems are the most obvious and common of this kind, and consequently (in Probability) most useful; yet, it must be acknowledg'd, they are no more than particular Cases; therefore I shall offer another more general, which may extend to all other possible Positions of a Cask of this Form.

P R O B L E M V.

Suppose a Cone ABD, Fig. 3. cut by a Plane GHI, passing thro' the Base in the Line GH, intersecting the one Side BA in the Point I, and the other Side AD extended beyond the Vertex in O; the Superficies of the Section upon the Cone will be an *Hyperbola*, whose Transverse Diameter is OI: Or suppose a Conical Cask so posited, that the Superficies of the Liquor remaining in it cut the Heads in the Lines HG and α : To find the Vacuity GHBK α , or the Quantity remaining GHD α L.

Given { The Diameters of the Greater Circle BD = 38,5 = D, of the Less KL = 29,7 = f.
The Vers'd Sine BE or greatest Depth of the Vacuity = 21,6 = c: And since it may be reasonably suppos'd the least KY cannot be actually measur'd, by a Level from B draw the Horizontal Line BW, which is therefore Parallel to EI, and extend the Line KL unto W: Then is WK = 7,8008 = x the Difference of the Vers'd Sines, or of the greatest and least Depths of the Vacuity.
A Perpendicular from B to the Line WK, viz. BM is the Length of the Cask = KF = β c = 32,7 = b.
The Horizontal Line WB = EY = 33,572 = α .

For Brevity put { the Difference of the Diameters BD - KL, i. e. D - f = d = 8,8 = 2BF.
the Axis of the Cone AC = $\frac{D b}{d}$ = P = 143,0625.
the Quantities { $\begin{cases} D x - d c = G = 110,2508. \\ D x + d c - 2 c x = R = 153,41624. \end{cases}$
 $\begin{cases} \sqrt{D c - c c} = H = \sqrt{365,04} = 19,10601999370878916594. \\ \sqrt{d x - x x} = k = \sqrt{7,79455936} = 2,79187380803645922953. \end{cases}$
the Logarithm of $\frac{R + 2 k H}{G}$ taken out of the common, or Briggs's Tables = l.
the Natural Logarithm of 10 = 2,302585092994045684 = L.
the Area of the Circle's Segment BGH taken out of the Table of Segments = S.
the Number ,7853981633974483096 = n.

Then will the Solidity of the Hyperbolic *Cuneus* BHGIB be = $\frac{1}{3} P \times D^2 n S - \frac{R H G}{2 D k^3} + \frac{L I G^3}{4 D k^3}$.

If the Area of the Circle's Segment GHD found in the Table be put = Z, then will the

Solidity of the greater part of the Cone DGHIAD be = $\frac{1}{3} P \times D^2 n Z + \frac{R H G}{2 D k^3} - \frac{L I G^3}{4 D k^3}$.

By the same *Theorem* may both the Parts of the less Cone AKL be obtain'd, only instead of the greater Diameter BD = D substitute the less KL = f = 29,7; and for the

the greater Versed Sine $BE = c$, the less $KY = v = 13,7992$. All the other Data remain the same.

Put $\left\{ \begin{array}{l} \text{the Axis of the Cone } BA = \frac{fb}{d} = p = 110,3625. \\ \text{the Quantities } \left\{ \begin{array}{l} fx - dv = g = 110,2508 = G \\ fx + dv - 2xv = r = 137,82712128. \\ \sqrt{fv - v^2} = b = \sqrt{219,41831936} = 14,8127755454539984061. \end{array} \right. \quad k \text{ is the same.} \\ \text{the Logarithm of } \frac{r + \frac{1}{2}bk}{g} \text{ taken out of Briggs's Tables, or those at the end} \\ \text{hereof} = l. \\ \text{the Segment } Ka \text{ taken out of the Table} = f. \end{array} \right.$

Then the Solidity of the Hyperbolic Cuneus $KaIK$ will be $= \frac{1}{3} P \times ffnf - \frac{rbg}{2k^2f} + \frac{Llg^3}{4fk^3}$.

If the Segment La be put $= z$, then the Solidity of the greater part $LaIAL$ will be $= \frac{1}{3} P \times ffnz + \frac{rbg}{2fk^2} - \frac{Llg^3}{4fk^3}$.

Note, That whether I , the Vertex of the Section, fall betwixt B and K , or betwixt K and A , it causes no Alteration in the Theorem; but if it be coincident with K , then the less Vers'd Sine KY or v vanisheth, and c must be every where substituted in the Place of x .

The Illustration hereof, tho' far more laborious than the former, ought not to be declined: But the deduction of the several Parts of the Theorem would require more and larger Schemes, and be too prolix and tedious to be here particularly insisted on. It will only be proper and convenient to shew whence some of the most necessary constitutive Parts are deriv'd, proceeding in the same Order as in the former.

The Semiordinate of the Hyperbola $EG = EH = \sqrt{BE \times ED} = \sqrt{Dc - cc}$ will be $19,10601999370878916594 = H$. The Axis of the Hyperbola $PE = \frac{Rk}{2k^2} = \frac{5150,4900928}{15,58911872} = 330,3900689826807605$.

The Transverse Semidiameter $IP = \frac{Gk}{2k^2} = 237,4309878627956206$: The Conjugate Semidiameter $ZI = XI = \frac{G}{2k} = 19,744946867340686928966$: The Semiordinate to the Asymptotes $NE = ES = \frac{R}{2k} = 27,475496843444101881061$. Divide the Sum of

the Semiordinates by the Conjugate Semidiameter, and the Quote $\frac{GE + NE}{ZI} = \frac{R + \frac{1}{2}Hk}{G}$ will be $2,359161417354912327532$, the Number to which a Logarithm must be adapted; which deduc'd from the Tables at the latter end is $0,372757656980626772437 = l$. This multiply'd by $2,302585$ &c. $= L$ is reduc'd to $0,8583062242630021049875 = Ll$ the Natural or Hyperbolic Logarithm. From the Rectangle of the Axis and Semiordinate of the Hyperbola $PE \times EH$, subtract the Product of this Logarithm into that of the Transverse and Conjugate Semidiameters, i. e. $Ll \times PI \times IX$: The Remainder will be the Area of the

the *Hyperbola* $GHI = \frac{RHx}{2k^2} - \frac{LIG^2x}{4k^3} = 6312,4392637059246823 - 4023,793000333$

$8886798 = 2288,6462633720360025$: This multiply'd by $\frac{1}{3}$ of the Perpendicular $AT =$

$$= \frac{Dbx - dbc}{3dx} = \frac{Gb}{3dx} = 4,067694805194805195. \text{ The Product } \frac{RHbG}{6dk^2} - \frac{LIG^3}{12dk^3} =$$

$= 9309,51451644693745$ is the Hyperbolic Pyramid $IGHAI$.

By the Tabular Vers'd Sine $\frac{e}{d} = \frac{216}{385} = ,561038961038961039$; or rather by its Complement $,43896103896103896$, take out of the Table, by a due Proportion, the Segment $,422476251739940578$; the Arith. Complement whereof, $,577523748260059422 = S$ being drawn into D^2n is $D^2nS = 672,327983683958399$; and this into $\frac{1}{3}$ the Cone's Altitude $= \frac{1}{3}P = 47,6875$ produces $\frac{1}{3}PD^2nS = 32061,64072192876614$ the Conical Pyramid $BGHAB$: From which deducting the Hyperbolic Pyramid $IGHAI =$
 $= 9309,51451644693274$, the Remainder $\frac{PD^2nS}{3} - \frac{RHbG}{6dk^2} + \frac{LIG^3}{12dk^3}$, equal to
 $\frac{1}{3}P \times D^2nS - \frac{RHG}{2Dk^2} + \frac{LIG^3}{4Dk^3} = 22752,12620548183340$, is the Hyperbolic *Cuneus*

$BGHIB$. This might have been more readily obtain'd from the Theorem immediately, but then the Reason and Method of the Operation had not been so evident.

The greater Part of the Cone $DGHIAD$ may be thus found, assuming the Segment of $DGH = Z = ,4224762517$ &c. (as before) which reduc'd is $D^2nZ = 491,828440$
 -11909358 : This drawn into $\frac{1}{3}P$ becomes $\frac{1}{3}PD^2nZ = 23454,0689238179275$ the Co-
 nical Pyramid $DGHAD$: To it adding the Hyperbolic Pyramid $IGHAI = 9309,51451644$

-69327 , it makes $32763,5834402648602 = \frac{1}{3}P \times D^2nZ + \frac{RHG}{2Dk^2} - \frac{LIG^3}{4Dk^3}$ the greater Part or Segment of the Cone $DGHIAD$.

In the less Cone AKL , the Quantities x, k, G , and the Transverse and Conjugate Semi-diameters are the same: The Axis of the *Hyperbola* $PY = \frac{Rx}{2k^2} = 296,81806898268$
 -07605 : The Semiordinate to the *Hyperbola* $aY = eY = \sqrt{f^2v - v^2} = b = 14,812$
 -7755454539984061 : The Semiordinate to the *Asymptotes* $Yn = Y\zeta = \frac{r}{2k} = 24,68$
 -36230354076426516 : The Sum of the Semiordinates $aY + Y\zeta$ divided by the Conju-
 gate Semidiameter IX quotes $\frac{r + 2bk}{G} = 2,0003294435899965175$, the Number for
 which the Logarithm, according to *Briggs's* Tables, is $0,3011015275393304119 = l$,
 which reduc'd to the Hyperbolic or natural Form is $,6933118887897983240474 = Ll$.

This multiply'd by $\frac{G^2x}{4k^3} = 4688,0622400111110474$, the Product $\frac{LIG^2x}{4k^3} = 3250,28$
 -928638623624 deducted from $\frac{r^2x}{2k^2} = 4396,6994336755315295$, leaves $1146,4101472$

$-892952877 = \frac{r^2x}{2k^2} - \frac{LIG^2x}{4k^3}$ the Area of the *Hyperbola* $a\epsilon l$; which drawn into $\frac{Gb}{3dx}$
 $= 4,067694805194805195$ or $\frac{1}{3}$ of the Perpendicular AT , produces $\frac{r^2Gb}{6k^2d} - \frac{LIG^3b}{12dk^3}$ equal
 to $4663,24660075127793 =$ the Hyperbolic Pyramid $Ia\epsilon AI$. By

By the Tabular Vers'd Sine $\frac{v}{f} = \frac{13,7992}{29,7} = ,4646195286195286195$, the Segment $,454989806248038566 = f$ is found in the Table; reduc'd 'tis $ffnf = 315,213236-8593787003$: This drawn into $36,7875 = \frac{1}{3}p$ or $\frac{1}{3}$ of the Axis, the Product $\frac{1}{3}pffnf = 11595,9069509643939$ is the Conical Pyramid $Ka:AK$: Out of which take the

Hyperbolic Pyramid $Ia:AI = \frac{r b G b}{6 k^2 d} - \frac{L l G^3 b}{12 k^3 d} = 4663,2466$ &c. The Residue $\frac{1}{3}P$

$\times ffnf - \frac{r b G}{2 f k^2} + \frac{L l G^3}{4 f k^3} = 6932,66035021311601$ is the Hyperbolic *Cuneus* $Ka:KI$;

which subtracted from the greater *Cuneus* $BGHb = 22752,1262054818334$, leaves $15819,4658552687174 =$ the *Truncus* $GHa:KB$ or the Vacuity.

If the Quantity remaining $DGHa:LD$ be requir'd, the Segment $La: = ,54501019-3751961434$ (the Arith. Complement of the Segment for $Ka:$) $= z$, reduc'd is $ffnz = 377,578629091876479$, multiply'd by $\frac{1}{3}$ of the Axis $= \frac{1}{3}p = 36,7875$ makes $\frac{1}{3}pffnz = 13890,17381771740597$ the Conical Pyramid $Aa:LA$: To which add the Hyperbo-

lic Pyramid $Ia:AI = \frac{r b G b}{6 k^2 d} - \frac{L l G^3 b}{12 k^3 d} = 4663,24660075127793$, and the Sum

$18553,4204184686839 = \frac{1}{3}P \times ffnz + \frac{r b G}{2 k^2 f} - \frac{L l G^3}{4 k^3 f}$ is the greater part or Seg-

ment of the less Cone $Ia:LAI$: This deducted from $32763,5834402648602$ equal to

$\frac{1}{3}P \times D^2 n S + \frac{R H G}{2 D k^2} - \frac{L l G^3}{4 D k^3}$ the greater Segment $DGIAD$, there remains the *Truncus*

$DGHa:LD = 14210,1630217961763$ the Quantity remaining in the Cask.

This last Problem (I presume) was never before expos'd to publick View, though the two preceding have been by One, to whom they were voluntarily and out of pure Civility communicated, I not in the least suspecting his Design to print 'em: But I was much more surpriz'd to see them come out so invidiously misrepresented and disguis'd, as if on purpose to render them unserviceable, and detract from or prejudice the Author's Reputation, of whom, in his *Preface*, so slight and undervaluing a Mention is made.

PROBLEM VI.

Suppose a Cone ABD , Fig. 4. cut by Planes, BS , KE , LM intersecting both its Sides: Or (which is a common Case) suppose a Conical Tun so inclin'd, that the Surface of the Liquor, when covering the bottom BD , shall extend to the Point S , being represented by the Line BS , which limits the *Ungula* BDS : But if the Liquor do not ascend to that Height, but suppose only to E , then its Superficies is terminated by the Line FGH , leaving so much of the Diameter of the Tuns bottom dry as is contain'd betwixt B and G . To find the true solid Capacity of, or the just Quantity contain'd in, that Section of the *Ungula* $EFHDE$. (1. Case.) When the bottom of the Tun is wider.

Given { the Lower or Greater Diameter of the *Ungula* $BD = b = 38,5$ $n = ,785398$ &c.
the Upper or Less Diameter $VS = d = 31$,
the Depth of the *Ungula* or nearest Distance of its Diameters $Sa = p = 18,2$.
the Depth of the Section taken also perpendicular to the bottom $En = c = 12,1$.

Put

the Transverse Diameter of the *Ungula* = $BS \sqrt{\frac{1}{4}b^2 + \frac{1}{4}dp + \frac{1}{4}d^2 + p^2} = g$
 $= 39,227573210689442293.$
 the Upper Diameter of the Section $LE = \frac{pb - cb + cd}{p} = b = 33,51373626-$
 -3736263736
 Put the Tabular Segment of the Circle whose Diameter is $BD = b$ and Vers'd Sine
 DG or $\frac{cb}{p} = S = ,706008515772565266.$
 the Tabular Segment of the Circle whose Diameter is $KE = \frac{bg}{d}$ and Vers'd Sine
 EG or $\frac{cg}{p} = Z = ,645082040022501621.$

Then will the Solidity of the *Ungular* Section $EFHDE$ be $= \frac{pb^3n}{3b-3d} \times bbs - \frac{b^3Z\sqrt{bd}}{dd}.$

The Illustration, which is equivalent to (and without Impropriety may be term'd) a Demonstration, follows.

The Vers'd Sine $DG = \frac{cb}{p}$: Hence the Tabular Vers'd Sine $\frac{c}{p} = \frac{1}{1.14} = ,6648-$
 -35164835164835 : By the Arith. Compliment whereof the Segment taken out of the
 Table is $,293991484227434734$. The Arith. Complement of it $,706008515772565266$
 $= S$ multiply'd by bbs is reduc'd to $bbs = 821,904351644651287$. And this by
 $\frac{1}{3} AC = \frac{pb^3}{3b-3d} = 31,14\frac{2}{3}$ becomes $\frac{pb^3n}{3b-3d} = 25595,92796432920696$ the Conical
 Pyramid $AFHDA$.

The Vers'd Sine $EG = \frac{cg}{p}$ divided by EK its Diameter $= \frac{bg}{d}$ is $\frac{cd}{bp} = \frac{682}{1109} =$
 $= ,6149684400360685302$ the Tabular Vers'd Sine. By its Arith. Complement is found
 (as before) the Segment $,645082040022501621 = Z$, which drawn into $EK^2 \times n$
 $= \frac{g^2b^2}{d^2} \times n = 1160,1660206756170319 \times n = \frac{g^2b^2nZ}{d^2} = 911,1922618747556-$
 -595 the Area of the Segment of the Circle whose Diameter is EK and Vers'd Sine EG :
 Then as the Transverse Diameter of the *Ellipsis* $EK = \frac{bg}{d}$: is to its Conjugate Di-
 ameter $\frac{b}{d} \sqrt{bd}$: so is the Segment of the Circle $\frac{b^2g^2nZ}{d^2}$: to the Segment of the
Ellipsis $EFH = \frac{b^2g^2nZ\sqrt{bd}}{dd} = 802,4718247089497688$. One third hereof multiply'd
 by the Perpendicular $AR = \frac{bpb}{bg-dg} = 79,8182607384301299$ is $21350,63511328-$
 $-758358 = \frac{pb^3nZ\sqrt{bd}}{3bd^2-3d^2}$ the *Elliptical* Pyramid $AFHEA$; which deducted from the Co-
 nical Pyramid $AFHDA$ leaves the Section or part of the *Ungula* $EFHDE = 4245,2928-$
 $-5104162337 = \frac{pb^3nS}{3b-3d} - \frac{pb^3nZ\sqrt{bd}}{3bd^2-3d^2} = \frac{pb^3n}{3b-3d} \times b^2S - \frac{b^3Z\sqrt{bd}}{dd}$: The Re-
 sult whereof in Numbers may be somewhat more readily obtain'd. From b^2S equal to
 1046,-

1046,481122503884865 subtract $\frac{b^3 Z \sqrt{bd}}{d^2}$ equal to 872,913716223204488: The Remainder 173,567406280680377 multiply'd by $\frac{pbn}{3b-3d} = 24,45904413744853469$ will produce 4245,292851041623365 the part, of the *Ungula* EFHDE requir'd: Hereby it will appear what Proportion this part bears to the whole *Ungula* DBS, which in the same Terms is $\frac{pbn}{3b-3d} \times \overline{bb-d\sqrt{bd}} = 10059,7810645407835647$: The whole Cone BDA is $36254,4181727330905457 = \frac{pbn}{3b-3d} \times \overline{bb}$, from which the *Elliptic* Cone BSA = $\frac{pbn}{3b-3d} \times \overline{d\sqrt{bd}} = 26194,6371081923069810$ being taken, leaves 10059,7810645407835647 the *Ungula* BDS; which may more easily be obtain'd, near enough for ordinary Practice, by this Approximation, BDS near = $\frac{pbn}{3b+3d} \times b^2 + \frac{1}{4}d^2 + \frac{7}{4}bd$, or $\frac{pbn}{3} \times b + \frac{1}{4}d - \frac{d^2}{2b+2d}$.

2. Case. When the lower or bottom Diameter is the less.

All the given Parts being the same, only the Depth of the Section VLN, or the nearest Distance of its Upper and Lower Diameters $V\zeta = f = 6,1$. The Transverse Diameter of the *Ungula* BS = g as before. The Upper Diameter of the Section LE = $\frac{pd+fb-fd}{p} = b$. The Vers'd Sine VN = $\frac{fd}{p}$ divided by its Diameter VS = d is $\frac{f}{p} = \frac{6,1}{11,3} = ,335164835164835165$ the Tabular Vers'd Sine, by which the Segment is found, 293991484227434734 = f : This drawn into ddn is 221,8952572678-1516478 = $ddnf$: And this into $\frac{1}{3}AX = \frac{pd}{3b-3d} = 25,07\frac{1}{2}$ is $\frac{pd^3nf}{3b-3d}$ equal to 5564,14685113339182 the Conical Pyramid AVPQA.

The Transverse Diameter of the *Ellipsis* LM = $\frac{bg}{b}$, by which the Vers'd Sine LN = $\frac{fg}{p}$ being divided will be $\frac{fb}{pb} = \frac{4,37}{11,3} = ,3850315599639314698$ the Tabular Vers'd Sine, whereby the Segment is found, 354917959977498379 = z . This multiply'd by LM $g \times n = \frac{g^2 b^2 n}{bb}$ gives $\frac{g^2 b^2 nz}{bb}$ the Segment of a Circle, whose Diameter is LM and Vers'd Sine LN: Then as the Transverse Diameter of the *Ellipsis* $\frac{bg}{b}$: to the Conjugate $\frac{b}{b}\sqrt{bd}$: so is the Segment of the Circle $\frac{b^2 g^2 nz}{bb}$ to the Segment of the *Ellipsis* LQP = $\frac{b^2 g^2 nz \sqrt{bd}}{bb} = 286,249507100152954$, which multiply'd by one third of the Perpendicular (AT = $\frac{pdh}{bg-dg} = 64,2692489062684163$) produces $\frac{pdh^3nz\sqrt{bd}}{3b^3-3b^2d}$ equal to 6132,34694037212617 the *Elliptical* Pyramid ALQPA; from which deduct the Coni-

cal Pyramid AVPQA = 5564,14685113339182 : The Residue 568,20008923873435 is the Section or part of the less Ungula VPQLV equal to $\frac{p d b^3 n z \sqrt{b d}}{3 b^3 - 3 b^2 d} - \frac{p d^3 n f}{3 b - 3 d}$ or $\frac{b^3 z \sqrt{b d}}{b b} - d d f \times \frac{p d n}{3 b - 3 d}$: From $\frac{b^3 z \sqrt{b d}}{b b} = 311,376815130526692$ subtra $\overline{c}$ t $d d f$ = 282,525816342564780 ; the Remainder 28,850998787961912 multiply'd by $\frac{p d n}{3 b - 3 d}$ = 19,6942952795040149 is 568,20008923873434 = the Section or part of the Ungula VPQLV, as before.

The whole Ungula BSV = $\frac{p d n}{3 b - 3 d} \times b \sqrt{b d} - d d$ is 7268,419344588948579, which may be had near enough for common Use by the Approximation $\frac{p d n}{3 b + 3 d} \times d^2 + \frac{1}{4} b^2 + \frac{7}{4} b d$; or $\frac{1}{3} p d n \times d + \frac{3}{4} b - \frac{b b}{2 b + 2 d}$: This and the former will always yield four, sometimes more true Figures : But the Failure in this Case is in Excess in the former, in Defect about $\frac{1}{1000000}$ th Part.

For the further Illustration of the Usefulness of the Eight small Tables relating to Differences, I have here subjoyn'd a Method of composing or proportioning Logarithms to any Natural Number given, or deducing by them the Natural Number from any Logarithm given, to any Number of Figures not exceeding sixty one. In order hereto are annex'd some Tables of Logarithms according to *Briggs's* Form (which are the most common and useful) viz. 1st, Of all Numbers to 100. 2^{dly}, Of all Prime Numbers to 1100. All which have been confirm'd by a double Operation to be true to an Unite in the sixty first Figure. 3^{dly}, Twenty Logarithms of the Numbers from 999990 to 1000010, and their Differences to the Tenth. These are extended to sixty three Figures to secure the Truth of the sixty first, and the Regularity of the Differences ; which otherwise, by the Deficiency or Redundancy of half an Unite or less in the last Figure, might be vitiated in three or more of the preceding, in the more remote Differences : All of them after the first would be most conveniently extended at Length (upon a Schedule to be folded) the better to shew their Dependance on each other, and to render the taking out of such as are requir'd the more easy and clear, and less liable to mistake, which, if they were plac'd below one another, would scarce be avoidable without much trouble and Caution. In every of the Differences, except the Tenth, a due Number are cut off by a vacant Space or Line, to prepare them according to the Rule, so as to render the ultimate Result just sixty-one Figures, that hereby it may be more easily discover'd how many are to be admitted in each Product. And tho' all the Figures following are to be reputed Decimals, yet they are by no means to be neglected, as is apparent in the Tenth, which though depress'd by the Cyphers prefix'd three Degrees below Unity, yet when multiply'd by its proper Number, is rais'd two places at least above it : Besides, it will be necessary to retain three or more Decimals or supernumerary Figures in every Operation, otherwise 'tis scarce conceivable that the last Figures of the Result should prove true, by reason of the various Multiplications which are unavoidable.

When the Logarithm of any Number is requir'd, the Number must be multiply'd or divided by some of the Primes under 1100, or their Products, so as that in the Result five Cyphers with an Unite prefix'd, or five Nines at least shall precede the rest of the

the Figures; then the Logarithm of that Result is to be deduc'd by a due Proportion from the last Table of twenty Logarithms, by the help of their Differences and the eight small Tables; which being found and apply'd, the Logarithm thereby rais'd must be deduc'd by the Logarithms of the Primes before us'd. *Ex. gr.* Suppose the Logarithm of 3,14159,26535,89793,23846,26433,83279,50288,41971,69399,37510,58209,749446 (the Number expressing the Proportion the Diameter of a Circle bears to its Circumference) be requir'd: If it be multiply'd by 31831 = 139 x 229, the Product will be 10000003575,64167,08572,50440,15331,69856,30688,00991,51508,99338,74534613, which falls so near the middle of the Table, that all the significant Figures 35756 &c. are the Particular Differences by which the Proportion is to be made. The Correction of the half second Difference being the first and most arduous Work to be undertaken: In order thereto, the third Number taken out of the I. Table is, 23739,30548,57108, -25997,44471,69061,55199,83474,74850; which multiply'd by the third Difference 86858,76609,25663,70809,52573,93666,83591,87386,79201 will produce 20619,66782, -38333,43333,29684,12134,46893,41783,29695: The fourth Number taken out of Tab. II. is found 9,29046,68062,58414,98256,61682,19749,83479,87877, by which 26057616, -79907,44279,88648,30625,833492,69697, the fourth mean Difference multiply'd produces 24208,74239,22002,62334,28231,44540,58490,570136. The fifth Number deduc'd from Tab. III. is 2,64565,90755,42349,67414,87898,65502,7749, which multiply'd by the fifth Difference 104230,41508,11336,00705,6954304,9737250 is 275,85525,29876,82-003,69834,62117,77424. The sixth Number from Tab. IV. = 192,92310,95326,63746, -38472,8819510 drawn into 52115,18148,34711,525938,17792 the sixth mean Diff. produces 1005,42228,65650,35468,27185,36098. The seventh Number taken from Tab. V. 39,25594,82781,35614,50646 multiply'd by the seventh Diff. 31269,09325,55543,04074 makes 12,27497,90754,42389,39614. The eighth Number out of Tab. VI. 4213,20370, -39147,249888 drawn into the eighth mean Difference 21888,3543,3507565 will produce 92,22009,55571,38607. The ninth Number from Tab. VII. 666,79019,86717, multiply'd by the ninth Difference 175,10674,7128 makes 1,16759,462705. The tenth Number out of Tab. VIII. 94702,10852 drawn into the tenth mean Diff. ,0001575960115 produces 14,9246746. Here it is to be observ'd, that in taking these Numbers out of their respective Tables for the making a due Proportion, if the first two Figures found in the Margin of the Table be less than 50 (as here they are 35) and the next two Figures by which the Tables must again be entred to take out the secondary Numbers, be greater than 50 (as here they are 75) then in all the Odd Tables, viz. 3^d, 5th and 7th, the Products of these secondary Odd Numbers into their proper Differences, i. e. 3^d, 5th and 7th must be subtracted from the respective half second mean Difference; but the Even Products, i. e. 4th, 6th, &c. are always to be added: And in the Even Tables, viz. 4th, 6th and 8th, all the Products are to be added. But if the first two Figures were greater than 50, or the second two less, it would be directly contrary, viz. in the Odd Tables all must be added, and in the Even Tables the Products of the Odd Differences subtracted: Hence the Rule accommodated to these Tables is, If the first two Couples of Figures be alike, i. e. both greater or both less than 50, the Products of all the Numbers must be added in the 3^d, 5th and 7th Tables, and those of the Odd Numbers subtracted in the 4th, 6th and 8th: But the contrary will obtain, if one Couple be less and the other greater than 50. Note also, that any one of the Secondary Numbers being found, it remains the same and serves for all the Tables. The several Products above are thus apply'd.

The Product of the third Number and Diff. 20619,66782,38333,43333,39684,12134,46893,41783,29695.
 The Product of the sixth 1005,42228,65650,35468,27185,36298.
 The Product of the seventh 12,27497,90754,42389,39614.
 The Product of the tenth 14,92467.

The Sum of the 3^d, 6th, 7th and 10th Products 20619,66782,38333,44338,71925,05282,73116,11372,97874
 to be added

The Product of the fourth Number and Diff. 24208,74239,22002,62334,28231,44540,58490,57014.
 The Product of the fifth 275,85525,29876,82003,69834,62117,77424.
 The Product of the eighth 92,22009,55571,38661.
 The Product of the ninth 1,16759,46270.

The Sum of the 4th, 5th, 8th and 9th Products 24208,74515,07527,92211,10327,36385,92939,19369
 to be Subtracted

The Difference or Correction to be added 20619,42573,63818,36810,79713,94955,36730,18433,78505.
 to the half second mean Diff. = 21,71470,23804,81925,60301,13320,98328,05572,64206,05492,87097.
 The Sum is $\frac{1}{2}$ second Diff. correct 21,71470,44424,24499,24119,50131,78042,00528,00936,23926,65602.
 to be multiply'd by the Arithmetical Complement of the particular Difference equal
 to 6424,35832,91426,49559,84668,30143,69311,99008,48491,00661,25465. Add the
 Product thereof 1,39503,04234,95607,25684,73802,99446,21884,99259,01434,11625,
 to 1st Diff. 43,42942,64756,15564,07439,42643,67770,70416,84136,16671,45121,61201
 The Sum 43,42944,04259,19799,03046,68328,41573,69863,06021,15930,46555,72826,
 is the first Difference corrected; which multiply'd by the particular Difference equal to
 35756,41670,85735,04401,53316,98563,06880,09915,15089,93387,4534613. From the
 Product = 1552,88116,92893,56313,56137,40505,84673,04534,84158,31860,50877,
 -76632 (the Characteristic 5, with six Cyphers being prefix'd, because 'tis the immediate
 Diff. of the Logarithms of the Number propos'd and of 1000000) deduct 4,50285,02-
 -825,93283,07458,43630,67846,50618,48156,26210,46114,07399,16824,24923 the Sum
 of the Logarithms of 139 and 229, viz. the Logarithm of 31831: The rest 0,49714,
 -98726,94133,85435,12682,88290,89887,36516,78324,38044,24461,34053,51709 is the
 Logarithm of the Number 3,14159 &c. which was requir'd, true in the sixty-first Figure;
 as will appear by the following Operation deduc'd from the Series exhibited by Dr. Hal-
 ley in *Philos. Trans.* N^o 216. The Number propos'd 3,14159265 &c. whereof the Lo-
 garithm is requir'd, being multiply'd by 27, produces 84,82300,164692,44174,38491,
 -3713485,46577,87332,35737,83127,85716,63235,039921 = b : The five first Figures
 hereof 84823 = a are the Product of 271×313 : The Difference of these two Num-
 bers $b - a = x = 00000001646924$ &c. divided by the Sum of them $b + a$ equal to
 1696460016469244174384913713485 &c. equal to z , yields the Quotient $\frac{x}{z}$ equal to
 0000000097080,06091,80375,07168,77079,59994,42154,65882,88821,25594,7123822
 = half the first Term of the Series

$$\frac{2x}{z} = 194,16012,18360,75014,33754,15919,98884,30931,76577,64251,18942,47644.$$

$$\frac{2x^3}{3z^3} = 6,09956,49685,60259,74331,40037,71709,71376,99791.$$

$$\frac{2x^5}{5z^5} = 34491,34993,16700,47470,36524.$$

$$\frac{2x^7}{7z^7} = 2321,89318.$$

The Sum of the Series = 194,16012,18360,75020,43710,65605,59144,39754,51608,52661,40111,73277.

Which

Which being multiply'd by ,43429,44819,03251,82765,11289,18916,60508,22943,97005,80366,65661,-
 14453,78316 the Reciprocal of 2,30258,50929,94045,684 &c. the Natural Logarithm of 10, is thereby
 reduc'd to the common Form 843226695190704529831982138064473812325534002160800088857
 To this add the 271 = 2,43296929087440572952118019487518026902802809971147471969596825144
 Logarithms of 313 = 2,49554433754644848480812650486124315157929869398571529931968127996
 From the Sum = 4,92851363685312116623635199805624480125206491695253004062365041997
 Subtr. Log. of 27000 = 4,43136376415898731188508370976534592760038659257208759448959692121
 The Remainder = 0,49714987269413385435126828829089887365167832438044244613405349876
 is the Logarithm of 3,14159 &c. desir'd, agreeing with the former, only less by 2 in the sixty second
 Figure.

The Natural Number may be obtain'd from the Logarithm given by this Method, with no less Accu-
 racy, though perhaps some what more Trouble. If the $\sqrt[36]{}$ of 1,06 be requir'd to be extracted, divide
 the Logar. of 1,06 = ,02530586526477024084673118635174961946369228275704632190453041690
 by 36: From the Quot., 000069331137711699289991044346169177039626554199334373484669946
 Subtract 0,00069481558728037517724712696738258667264357996844997689493108;
 which is the Logarithm of 1,00016 = 2,8 x ,47 x ,76 compos'd by the Addition of their three Logarithms.
 Out of the Remainder 99999849578983661772266331649430918372362196202489375795176838
 take the next less of 20 99999565705300949362455787082464241603363057915886914008641779
 Rests a constant Dividend 283873682712409810544566966676768999138286602461786535059

The first Divisor is seven Figures of the first Difference 4342947: By which dividing
 2838736 &c. the first Quotient is 6536429. By its Arith. Complement 3463571 multi-
 ply the half second mean Difference 21714746: The Product 75210563 added to 4342-
 94699050637 the first Difference makes 43429477426120 the second Divisor: Hereby
 the second Quotient will be 65364287008823, wherewith seven or eight Figures of the
 third Number must be taken out of Tab. I. = ,25607145; which drawn into the third
 Difference 86859026 +, and the Product 22242117 subtracted out of half the second
 Diff. 2171474580993, the Remainder 2171474358572 multiply by 34635712991177 the
 Arith. Complement of the last Quotient, and add the Product 75210562651199 to the
 first Difference 43429469905063754421. By the Sum 43429477426120019541 (the
 third Divisor) again divide 28387 &c. and by the third Quotient 65364287008822759897
 extend the third Number to ,25607145014705; which drawn into the third Difference
 8685902666925 produces 2224211691756. Take out of Tab. II. six or seven Figures
 of the fourth Number 9,276641; which drawn into the fourth mean Difference 2605772
 is 2417281: This added to the third Product, and the Sum 222435864568 taken from
 21714745809930116058 the half second mean Difference, the Remainder 217147-
 4358569425149 multiply by 34635712991177240103 the Arith. Complement of the
 third Quotient; and the Product 75210562651111303122 added to the first Difference,
 makes the fourth Divisor 43494774261200195324220658, by which 653642870088-
 22759908512675 the fourth Quotient is obtain'd, the which consists of Figures nearly
 sufficient for the taking all the rest of the Numbers out of their respective Tables: To
 avoid that Prolixity and those tedious (if not nauseous) Repetitions which the particula-
 rizing of the six remaining Operations must necessarily require, since for every Difference
 there must be a renew'd Operation, (like the preceding) but every one greater, and con-
 sisting of more Figures than the former, by every Odd Number five true Figures being
 added to the Quotient, and by each Even six or more; pretermittting the particular Steps
 by which the Quotient is gradually rais'd, I shall (as in the former) specify the several
 Numbers, Differences and Products with their Application, and the tenth or finishing Ope-
 ration at length, with the Proof. The third Number intire ,25607,14501,47045,99847,-
 52112,24125,13628,47240,21825,74352 multiply'd by the third Diff. 86859,02666,-
 92555,13629,21129,38532,74652,37517, ⁴⁴⁸⁰⁶ gives the third Product = 22242,11691,-
 75572,02098,69257,56818,08875,83210, ⁴⁴⁵⁴²⁷⁷. The fourth Number 9,27664,11186,-

-29383,40382,88308,29844,64637,78937 multiply'd by the fourth mean Difference 26057,72102,97500,85811,39369,91055,92025¹⁶³⁰⁷⁵ is 24172,81263,62353,24445,-97293,97801,51984,⁵⁸⁴⁶³³ the fourth Product: The fifth Number 2,85057,95324,-89369,41193,13307,82676,535 drawn into the fifth Difference 10423,09362,34511,-89007,99990,837⁸⁹⁰¹⁴ is 29711,85734,82304,17784,28143,517,⁷¹⁰⁵⁸³ the fifth Product: The sixth Number 192,53340,46034,68112,99794,71723,09 multiply'd by the sixth mean Difference 52115,49417,54981,302312,⁸⁰⁹⁹⁵⁹⁷ produces 1003,39735,26200,-86733,71072⁰⁰⁹⁶³⁹: The seventh Number 42,25912,12444,78304,094769 drawn into the seventh Difference 31269,31213,99731,⁸⁸⁵⁰⁶⁵⁶ the Product is 13,21413,65295,-45643,¹²⁰⁴⁵³: The eighth Number 4203,55220,98566,04923 multiply'd by the eighth mean Difference 218885294,⁴²⁶¹⁰⁷⁶ produces 92,00957,63089⁹⁷⁸³⁰⁷: The ninth Number 717,60647339685 in the ninth Diff. 175,108323095 produces 1,25658,⁸⁶⁶¹⁹⁹: The tenth Number 94469,66928 in the tenth mean Difference ,000157597566 yields 14,⁸⁸⁸¹⁸⁹⁹.

To half the second mean Diff.	21,71474,58099,30116,05848,24417,82586,36071,59816,67753,471125.
Add the fifth Product	297,11857,34823,04177,84281,43517,710583.
The sixth Product	1003,39735,26200,86733,71072,009639.
The ninth Product	1,25658,866199.
The tenth Product	14,888190.

And from their Sum, viz. from 21,71474,58099,30116,06145,37278,57144,66450,30833,08016,945736

Subtract the third Product	22242,11691,75572,02098,69257,56818,08875,83210,445428.
The fourth Product	24172,81263,62353,24445,97293,97801,51984,384633.
The seventh Product	13,21413,65295,45643,120453.
The eighth Product	92,00957,63089,978307.

The Sum of those Products to be Subtr. = 22242,35864,56835,64451,93716,75617,72930,43927,928821.
 The rest is the $\frac{1}{2}$ Diff. correct = 21,71474,35856,94251,49309,72826,63427,90832,57902,64089,016915.
 By 3463571,29911,77240,09148,73265,52491,82291,65586,90455,388512 being the Arith. Complement of the Quotient obtain'd, by the eighth or ninth of the aforesaid Essays, multiply that $\frac{1}{2}$ second Diff. correct.
 Add the Product 75,21056,26511,11303,13332,42986,53516,28378,71641,80829,013313
 to the first Difference 4342,94699,05063,75442,12917,53575,83966,36942,08411,30859,91358,220895.
 And by the Sum thereof 4342,94774,26120,01953,24220,66908,26952,90458,36790,02501,72187,234208
 divide the constant Dividend 28387 &c. The Quotient 6536,42870,08822,75990,85126,-73447,50817,70834,41309,54461,14878,7837 being added to the Marginal Number 999999, (found in the little Table of Twenty Logarithms) by 1,00016 multiply their Sum, viz. 99999,96536,42870,08822,75990,85126,73447,50817,70834,41309,54461,14878,7837:
 The Product 1,00015,96535,87452,94744,17155,00980,35475,25977,83917,74660,15413,86257,1643 is $\sqrt[365]{1}$ of 1,06 true to an Unite in the sixty first Figure. To confirm the Truth of this Operation, subtract the Diff. of the Logarithms of $\sqrt[365]{1,06}$, and of 1,00016, viz. 9999998-4957,898 &c. (before express'd) out of 1,0000000 &c. which is the next greater Logarithm in the little Table of 20 Logarithms, suiting the Characteristic thereto: The Remainder will be = 15042,10163,38227,73366,83505,69081,62763,78037,97510,62420,-48231,6188 the other Dividend. Multiply the $\frac{1}{2}$ second Diff correct 217147435856 &c. by the ninth Quotient 653642870088 &c. and subtract the Product 14193,68732,05831,-21179,76485,27980,76279,94707,38460,06115,5837 from the first Diff. there remains 43429,45571,13764,33838,17057,38109,86865,61792,84642,34753,12970,65058 for the Divisor; by which 1504210163 &c. being divided, the Quotient ,00000034635,71299,-11772,40091,48732,65524,91822,91655,86904,55388,51212,1626 deducted from 100-0000 the Marginal Number, leaves 99999965364287 &c. the same as above, the Natural Number answering to 99999984957898 &c. the Logarithm given. But a more certain and indisputable Proof will arise from Dr. Halley's Series in *Philos. Trans.* N° 216. The Logarithm of $\sqrt[365]{1,06}$ = ,000069331137 &c. taken from the Logarithm of 1,00016 = ,0000694815 &c. leaves ,00000150421016338 &c. as above: Put it = π : This being

being reduc'd to the Natural Form by multiplying it by 2,302585 &c. = 1, the Natural Logarithm of 10 becomes thereby

$$\begin{array}{r}
 1n = 1,0000003463,57189,89341,69713,22305,54835,82225,32861,41751,01028,01330,626077. \\
 1^2n^2 = 119,96330,29908,64503,38236,86101,03636,37764,19566,53717,656453. \\
 1^3n^3 = 4,15501,52514,24837,28993,16427,39396,16938,86692,677094. \\
 1^4n^4 = 14391,19406,44779,60302,49067,81615,53538,910983. \\
 1^5n^5 = 498,44935,35383,40809,76217,00670,930003. \\
 1^6n^6 = 17,26415,17395,73003,83889,945538. \\
 1^7n^7 = 59795,63082,41205,182955. \\
 1^8n^8 = 2071,06466,601466. \\
 1^9n^9 = 71,732814.
 \end{array}$$

$$\begin{array}{r}
 1 + \frac{1}{2} 1^2n^2 = 1,00000,00000,00059,98165,14954,32251,69118,43050,51818,18882,09783,26858,828226. \\
 24) 1^4n^4 = 599,63308,60199,15012,60377,82567,31397,454624. \\
 720) 1^6n^6 = 2397,79885,27184,72755,402702. \\
 40320) 1^8n^8 = 5136,569112.
 \end{array}$$

Sum of the even Pow. 1,00000,00000,00059,98165,14954,32251,69118,43050,51818,18882,09783,26858,828226.

$$\begin{array}{r}
 1n = 3463,57189,89341,69713,22305,54835,82225,32861,41751,01028,01330,626077. \\
 6) 1^3n^3 = 69250,25419,04139,54832,19404,56566,02823,14448,779516. \\
 120) 1^5n^5 = 4,15374,46128,19506,74801,80838,924417. \\
 5040) 1^7n^7 = 11,86421,24651,032774. \\
 362880) 1^9n^9 = 198.
 \end{array}$$

Sum of the Odd Powers Subtrah'd 3463,57189,89342,38963,47724,58979,52431,98394,17835,65074,21269,362982.

The Result of the Series 9999996536,42870,08822,75990,85126,73447,50817,70834,41309,54461,14878,891683.

This multiply'd by 1,00016

produces 1,00015,96535,87452,94744,17155,00980,35475,25977,83917,74660,15413,86257,27230. exceeding the former only an Unite in the sixty first Figure.

This latter Operation (it must be acknowledg'd) is tedious enough, by reason of the large and so often renewed Divisions; but 'tis easy so to manage them as to abbreviate the Work near one half, by converting so much thereof as the former Quotient extends to into Multiplication; and in every Member of the following, retaining only three of the last Figures of the foregoing; and about the seventh or eighth Repetition a considerable Number of the middle Terms of the Division may be compleated and collected altogether into one Sum, and so us'd in the succeeding Operations which will exceedingly shorten the Work: The like Method may be us'd in the repeated Multiplications of the half second correct Difference.

Hence it may easily be collected how many Figures may be obtain'd by any of the Differences, either in making the Logarithm or in finding the Natural Number. If the first only be us'd, 13 or 14 may be got, 20 by the second, 25 by the third, 31 or 32 by the fourth, 36 by the fifth, 42 by the sixth, 47 by the seventh, 53 by the eighth, 58 by the ninth, and 64 might be had from the tenth, if the Logarithms were extended so far. Although it may seem too laborious to carry on the Operation to so great a Number of Figures, yet this will, in all Probability, be found the easiest and most expeditious Method for raising a Logarithm or deducing a Natural Number from one given to twenty Figures or upwards: Whereas to obtain a Logarithm or Natural Number to the utmost Length of the largest Tables extant, which reach only to fourteen Figures, little less Labour is requir'd; yet after the greatest Care the last Figure will ordinarily be vitiated, so that no more than thirteen can be depended on with any Certainty.

The Natural Logarithm of 10 is

2,30258,50929,94045,68401,79914,54684,36420,76011,01488,62877,29760,33327,901.

The Reciprocal of it is

0,43429,44819,03251,82765,11289,18916,60508,22943,97005,80366,65661,14453,783.

A TABLE for the Reduction of the SEGMENTS into their Natural Form, being the Products of the Number call'd n to 100.

1	78539,81633,97448,309616	51	4005530,63332,69863,790399
2	157079,63267,94896,619231	52	4084070,44966,67312,100014
3	235619,44901,92344,928847	53	4162610,26600,64760,409630
4	314159,26535,89793,238463	54	4241150,08234,62208,719246
5	392699,08169,87241,548078	55	4319689,89868,59657,028861
6	471238,89803,84689,857694	56	4398229,71502,57105,338477
7	549778,71437,82138,167310	57	4476769,53136,54553,648093
8	628318,53071,79586,476925	58	4555309,34770,52001,957708
9	706858,34705,77034,786541	59	4633849,16404,49450,267324
10	785398,16339,74482,096157	60	4712288,98038,46898,576940
11	863937,97973,71931,405772	61	4790928,79672,44346,886555
12	942477,79607,69379,715388	62	4869468,61306,41795,196171
13	1021017,61241,66828,025004	63	4948008,42940,39243,505787
14	1099557,42875,64276,334619	64	5026548,24574,36695,815402
15	1178097,24509,61724,644235	65	5105088,06208,34140,125018
16	1256637,06143,59172,953851	66	5183627,87842,31588,434634
17	1335176,87777,56621,263466	67	5262167,69476,29036,744249
18	1413716,69411,54069,573082	68	5340707,51110,26485,053865
19	1492256,51045,51517,882698	69	5419247,32744,23933,363481
20	1570796,32679,48966,192313	70	5497787,14378,21381,673096
21	1649336,14313,46414,501929	71	5576326,96012,18829,982712
22	1727875,95947,43862,811545	72	5654866,77646,16278,292328
23	1806415,77581,41311,121160	73	5733406,59280,13726,601943
24	1884955,59215,38759,430776	74	5811946,40914,11174,911559
25	1963495,40849,36207,740392	75	5890486,22548,08623,221175
26	2042035,22483,33656,050007	76	5969026,04182,06071,530790
27	2120575,04117,31104,359623	77	6047565,85816,03519,840406
28	2199114,85751,28552,669239	78	6126105,67450,00968,150022
29	2277654,67385,26000,978854	79	6204645,49083,98416,459637
30	2356194,49019,22449,288470	80	6283185,30717,95864,769253
31	2434734,30653,20897,598085	81	6361725,12351,93313,078869
32	2513274,12287,18345,907701	82	6440264,93985,90761,388484
33	2591813,93921,15794,217317	83	6518804,75619,88209,698100
34	2670353,75555,13242,526932	84	6597344,57253,85658,007716
35	2748893,57189,10690,836548	85	6675884,38887,83106,317331
36	2827433,38823,08139,146164	86	6754424,20521,80554,626947
37	2905973,20457,05587,455779	87	6832964,02155,78002,936562
38	2984513,02091,03035,765395	88	6911503,83789,75451,246178
39	3063052,83725,00484,075011	89	6990043,65423,72899,555794
40	3141592,65258,97932,284626	90	7068583,47057,70347,865409
41	3220132,46992,95380,694242	91	7147123,28691,67796,175025
42	3298672,28626,92829,003858	92	7225663,10325,65244,484641
43	3377212,10260,90277,313473	93	7304202,91959,62692,794256
44	3455751,91894,87725,623089	94	7382742,73593,60141,103872
45	3534291,73528,85173,932705	95	7461282,55227,57589,413488
46	3612831,55162,82622,242320	96	7539822,36861,55037,723103
47	3691371,36796,80070,551936	97	7618362,18495,52486,032719
48	3769911,18430,77518,861552	98	7696902,00129,49934,342335
49	3848451,00064,74967,171167	99	7775441,81763,47382,651950
50	3926990,81698,72415,480782	100	7853981,63397,44830,961566

A Table of AREAS of the Segments of a Circle, whose whole AREA is 1,00000,00000,000000.

Verf. Sine.	Area of Segments.	Differences.	Verf. Sine.	Area of Segments.	Differences.
0001	00000,16976,0179582	31037,9711217	0751	00061,73600,6464386	182272,3561495
0002	00000,48013,9890799	40190,6946251	0052	00063,55873,002581	184024,2604938
0003	00000,88204,6837060	47591,2357686	0053	00065,39897,2637819	185759,2937281
0004	00001,35795,9194746	53978,9523924	0054	00067,25656,5568100	187477,9242866
0005	00001,89774,8718670	59683,1891791	0055	00069,13134,4810966	189180,5992303
0006	00002,49458,0610461	64885,5895109	0056	00071,02315,0803269	190867,7455891
0007	00003,14343,6505570	69699,1054381	0057	00072,93182,8259160	192539,7715964
0008	00003,84042,7559951	74199,7013290	0058	00074,85722,5975124	194197,0678287
0009	00004,58242,4573241	78441,3895409	0059	00076,79919,5653411	195840,0082567
0010	00005,35683,3468650	82464,2095768	0060	00078,75759,6735978	197468,9512184
0011	00006,19148,0564418	86298,8228779	0061	00080,73228,5248162	199084,2403190
0012	00007,05446,8793197	89969,3290779	0062	00082,72312,8651352	200686,2052664
0013	00007,95416,2083876	93495,0794390	0063	00084,72999,0704016	202275,1626454
0014	00008,88911,2878266	96891,8925247	0064	00086,75274,2330470	203851,4166386
0015	00009,85873,1803513	100172,8964736	0065	00088,79125,6496856	205415,2596962
0016	00010,85976,0768249	103349,1294310	0066	00090,84540,9093818	206966,9731505
0017	00011,89325,2062559	106429,9778576	0067	00092,91507,8825423	208506,8278485
0018	00012,95755,1841135	109423,5032620	0068	00095,00014,7103908	210035,0845945
0019	00014,05178,6873756	112336,6902284	0069	00097,10049,7949853	211551,9947592
0020	00015,17515,3776039	115175,6377441	0070	00099,21601,7897445	213057,8007044
0021	00016,32691,0153480	117945,7089145	0071	00101,34659,5904489	214552,7362377
0022	00017,50636,7242625	120651,6496192	0072	00103,49212,3266866	216037,0270305
0023	00018,71288,3738817	123297,6836410	0073	00105,65249,3537171	217510,8910083
0024	00019,94586,0575227	125887,5897335	0074	00107,82760,2447254	218974,5387187
0025	00021,20473,6472562	128424,7646460	0075	00110,01734,7834441	220428,1736768
0026	00022,48898,4119022	130912,2751162	0076	00112,22162,9571209	221871,9926895
0027	00023,79810,6870184	133352,9011017	0077	00114,44034,9498104	223306,1861613
0028	00025,13163,5881201	135749,1719899	0078	00116,67341,1359717	224730,9383836
0029	00026,48912,7601100	138103,3971325	0079	00118,92072,0743553	226146,4278043
0030	00027,87016,1572425	140417,6917560	0080	00121,18218,5021596	227552,8272854
0031	00029,27433,8489985	142693,9990746	0081	00123,45771,3294450	228950,3043449
0032	00030,70127,8480731	144934,1092672	0082	00125,74721,6337899	230339,0213851
0033	00032,15061,9573403	147139,6758429	0083	00128,05060,6551750	231719,1359089
0034	00033,62201,6331832	149312,2298227	0084	00130,36779,7910839	233090,8007249
0035	00035,11513,8630059	151453,1920836	0085	00132,69570,5918088	234454,1641407
0036	00036,62967,0550895	153563,8841470	0086	00135,04324,7559495	235809,3701464
0037	00038,16530,9392365	155645,5376460	0087	00137,40134,1260959	237156,5585894
0038	00039,72176,4768825	157699,3026615	0088	00139,77290,6846853	238495,8653386
0039	00041,29875,7795440	159726,2550923	0089	00142,15786,5500240	239827,4224419
0040	00042,89602,0346363	161727,4031875	0090	00144,55613,9724659	241151,3582750
0041	00044,51329,4378238	163703,6933597	0091	00146,96765,3307409	242467,7976826
0042	00046,15033,1311835	165656,0153692	0092	00149,39233,1284235	243776,8621133
0043	00047,80589,1465527	167585,2069638	0093	00151,83009,9905368	245078,6697478
0044	00049,48274,3535165	169492,0580399	0094	00154,28088,6602846	246373,3356203
0045	00051,17766,4115564	171377,3143861	0095	00156,74461,9959049	247660,9717353
0046	00052,89143,7259425	173241,6810577	0096	00159,22122,9676402	248941,6871778
0047	00054,62385,4070002	175085,8254259	0097	00161,71064,6543180	250215,5882190
0048	00056,37471,2324261	176910,3799420	0098	00164,21280,2430370	251482,7784171
0049	00058,14381,6123681	178715,9446419	0099	00166,72763,0214541	252743,3587132
0050	00059,93097,5570100	180503,0894286	0100	00169,25506,3801673	253997,4275230

<i>Verf. Sine.</i>	<i>Area of Segments.</i>	<i>Differences.</i>	<i>Verf. Sine.</i>	<i>Area of Segments.</i>	<i>Differences.</i>
0101	00171,79503,8076903	255245,0808247	0151	00313,57186,7212989	311050,7638125
0102	00174,34748,8885150	256486,4122428	0152	00316,68237,4851114	312059,8032088
0103	00176,91235,3007578	257721,5131279	0153	00319,80297,2883202	313065,3382515
0104	00179,48956,8138857	258950,4726338	0154	00322,93362,6715717	314067,5371692
0105	00182,07907,2865195	260173,3777901	0155	00326,07430,2087409	315066,2976552
0106	00184,68080,6643096	261390,3135736	0156	00329,22496,5063961	316061,6968798
0107	00187,29470,9778832	262601,3629743	0157	00332,38558,2032759	317053,7665014
0108	00189,92072,3408575	263806,6070608	0158	00335,55611,9697773	318042,5376783
0109	00192,55878,9479183	265006,1250418	0159	00338,73654,5074556	319028,0410797
0110	00195,20885,0729601	266199,9943251	0160	00341,92682,5485353	320010,3068959
0111	00197,87085,0672852	267388,2905750	0161	00345,12692,8554312	320989,3648494
0112	00200,54473,3578602	268571,0877662	0162	00348,33682,2202806	321965,2442046
0113	00203,23044,4456264	269748,4582367	0163	00351,55647,4644853	322937,9737777
0114	00205,92792,9038631	270920,4727382	0164	00354,78585,4382630	323907,5819462
0115	00208,63713,3766013	272087,2004839	0165	00358,02493,0202092	324874,0966584
0116	00211,35800,5770852	273248,7071955	0166	00361,27367,1168676	325837,5454425
0117	00214,09049,2862807	274405,0651475	0117	00364,53204,6623101	326797,9554149
0118	00216,83454,3514282	275556,3332106	0168	00367,80002,6177250	327755,3532894
0119	00219,59010,6846388	276702,5768926	0169	00371,07757,9710144	328709,7653852
0120	00222,35713,2615314	277843,8583783	0170	00374,36467,7363996	329661,2176351
0121	00225,13557,1199097	278980,2385681	0171	00377,66128,9540347	330609,7355934
0122	00227,92537,3584778	280111,7771147	0172	00380,96738,6896281	331555,3444437
0123	00230,72649,1355925	281238,5324583	0173	00384,28294,0340718	332498,0690062
0124	00233,53887,6680508	282360,5618617	0174	00387,60792,1030780	333437,9337451
0125	00236,36248,2299125	283477,9214424	0175	00390,94230,0368231	334374,9627759
0126	00239,19726,1513549	284590,6662048	0176	00394,28604,9995990	335309,1798720
0127	00242,04316,8175597	285698,8500713	0177	00397,63914,1794710	336240,6084718
0128	00244,90015,6676310	286802,5259113	0178	00401,01547,879428	337169,2716849
0129	00247,76818,1935423	287901,7455700	0179	00404,37324,0596277	338095,1922991
0130	00250,64719,9391123	288996,5598962	0180	00407,75419,2519268	339018,3927860
0131	00253,53716,4990085	290087,0187689	0181	00411,14437,6447128	339938,8953075
0132	00256,43803,5177774	291173,1711225	0182	00414,54376,5400203	340856,7217218
0133	00259,34976,6888999	292255,0649726	0183	00417,95233,2617421	341771,8935891
0134	00262,27231,7538725	293332,7474393	0184	00421,37005,1553312	342684,4321771
0135	00265,20564,5013118	294406,2647706	0185	00424,79689,5875083	343594,3584667
0136	00268,14970,7660824	295475,6623652	0186	00428,23283,9459750	344501,6931575
0137	00271,10446,4284476	296540,9847936	0187	00431,67785,6391325	345406,4566730
0138	00274,06987,4132412	297602,2758197	0188	00435,13192,0958055	346308,6691655
0139	00277,04589,6890609	298659,5784207	0189	00438,59500,7649709	347208,3505214
0140	00280,03249,2674816	299712,9348072	0190	00442,06709,1154923	348105,5203660
0141	00283,02962,2022888	300762,3864419	0191	00445,54814,6358583	349000,1980685
0142	00286,23724,5887308	301807,9740581	0192	00449,03814,8339268	349892,4027460
0143	00289,05532,5627889	302849,7376777	0193	00452,53370,2366728	350782,1532691
0144	00292,08382,3004666	303887,7166283	0194	00456,04489,3899419	351669,4682650
0145	00295,12270,0170949	304921,9495602	0195	00459,56158,8582069	352554,3661236
0146	00298,17191,9666551	305952,4744625	0196	00463,08713,2243305	353436,8650002
0147	00301,23144,4411176	306979,3286790	0197	00466,62150,0893307	354316,9828201
0148	00304,30123,7697966	308002,5489231	0198	00470,16467,0721508	355194,7372833
0149	00307,38126,3187197	309022,1712931	0199	00473,71661,8094341	356070,1458675
0150	00310,47148,4900128	310038,2312861	0200	00477,27731,9553016	356943,2258330

Verf. Sine.	Area of Segments.	Differences.	Verf. Sine.	Area of Segments.	Differences.
0201	00480,84675,1811346	357813,9942253	0251	00669,980110,675637	398729,0993555
0202	00484,42489,1753599	358682,4678800	0252	00673,96740,1669192	399500,5235288
0203	00488,01171,6432399	359548,6634256	0253	00677,96240,6904430	400270,2989654
0204	00491,60720,3066655	360412,5972874	0254	00681,96510,9894135	401038,4351595
0205	00495,21132,9039529	361274,2856909	0255	00685,97549,4245730	401804,9415124
0206	00498,82407,1896438	362133,7446654	0256	00689,99354,3660854	402569,8273339
0207	00502,44540,9343092	362990,9900465	0257	00694,01924,1934193	403333,1018437
0208	00506,07531,9243557	363846,0374808	0258	00698,05257,2952630	404094,7741721
0209	00509,71377,9618365	364698,9024275	0259	00702,09352,0694351	404854,8533623
0210	00513,36076,8642640	365549,4001628	0260	00706,14206,9227974	405613,3453702
0211	00517,01626,4644268	366398,1457821	0261	00710,19820,2711676	406373,2680666
0212	00520,68024,6102089	367244,5542032	0262	00714,26190,5392343	407125,6212379
0213	00524,35269,1644121	368088,8401695	0263	00718,33316,1604722	407879,4165873
0214	00528,03358,0045816	368931,0182526	0264	00722,41195,5770595	408631,6627358
0215	00531,72289,0228342	369771,1028549	0265	00726,49827,2397953	409382,3682235
0216	00535,42060,1256891	370609,1082130	0266	00730,59209,6080188	410131,5415105
0217	00539,12669,2339022	371445,0483995	0267	00734,69341,1495293	410879,1909779
0218	00542,84114,2823017	372278,9373264	0268	00738,80220,3405072	411625,3249293
0219	00546,56393,2196281	373117,7887472	0269	00742,91845,6654365	412369,9515909
0220	00550,29504,0083753	373940,6162595	0270	00747,04215,6170274	413113,0791133
0221	00554,03444,6246348	374768,4333076	0271	00751,17328,6961407	413854,7155723
0222	00557,78213,0579424	375594,2531850	0272	00755,31183,4117130	414594,8682695
0223	00561,53807,3111274	376418,0890363	0273	00759,45778,2806825	415333,5472339
0224	00565,30225,4001637	377239,9538602	0274	00763,61111,8279164	416070,7582221
0225	00569,07465,3540239	378059,8605109	0275	00767,77182,5861385	416806,5097196
0226	00572,85525,2145348	378877,8217014	0276	00771,93989,0958581	417540,8094419
0227	00576,64403,0362363	379693,8500048	0277	00776,11529,9053000	418273,6650350
0228	00580,44096,8862411	380507,9578567	0278	00780,29803,5703350	419005,0840763
0229	00584,24604,8440978	381320,1575575	0279	00784,48808,6544112	419735,0740757
0230	00588,05925,0016553	382130,4612744	0280	00788,68543,7284870	420463,6424765
0231	00591,88055,4629297	382938,8810431	0281	00792,89007,3759636	421190,7366558
0232	00595,70994,3439728	383745,4287702	0282	00797,10198,1676194	421916,5439257
0233	00599,54739,7727430	384550,1162348	0283	00801,32114,7115451	422640,8915338
0234	00603,39289,8889778	385352,9550908	0284	00805,54755,6030788	423353,8466644
0235	00607,24642,8440686	386153,9568682	0285	00809,78119,4497432	424085,4164389
0236	00611,10796,8009368	386953,1329755	0286	00814,02204,8661821	424805,6079168
0237	00614,97749,9339123	387757,4947011	0287	00818,27010,4740989	425524,4280964
0238	00618,85500,4286134	388546,0532153	0288	00822,52534,9021953	426241,8839152
0239	00622,74046,4818287	389339,8195721	0289	00826,78776,7861106	426957,9822515
0240	00626,63386,3014008	390131,8047102	0290	00831,05734,7683621	427672,7299241
0241	00630,53518,1061110	390922,0194560	0291	00835,33407,4282862	428386,1336936
0242	00634,44440,1255670	391710,4745236	0292	00839,61793,6319798	429098,2002630
0243	00638,36150,6000906	392497,1805179	0293	00843,90891,8322428	429808,9362784
0244	00642,28647,7806086	393282,1479352	0294	00848,20700,7685212	430518,3483296
0245	00646,21929,9285438	394065,3871651	0295	00852,51219,1168508	431226,4429507
0246	00650,15995,3157089	394846,9084920	0296	00856,82445,5598015	431933,2266209
0247	00654,10842,2242009	395626,7220966	0297	00861,14378,7864224	432638,7057654
0248	00658,05468,9452975	396404,8380572	0298	00865,47017,4921878	433342,8867552
0249	00662,02873,7843547	397181,2663515	0299	00869,80360,3789430	434045,7759087
0250	00666,00055,0507062	397956,0168575	0300	00874,14406,1548517	434747,3794917

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Verf. Sine.	Area of Segments.	Differences.	Verf. Sine.	Area of Segments.	Differences.
0301	00878,49153,5343435	435447,7037183	0351	01104,54340,9841133	468956,5868525
0302	00882,84651,2380618	436146,7547514	0352	01109,23297,5709658	469598,8551562
0303	00887,20747,9928132	436844,5387030	0353	01113,92896,4261220	470240,1083319
0304	00891,57592,5315162	437541,0616353	0354	01118,63136,5344539	470880,3505268
0305	00895,95133,5931515	438236,3295612	0355	01123,34016,6849507	471519,5858591
0306	00900,33369,9227127	438930,3484444	0356	01128,05536,4708398	472157,8184183
0307	00904,72300,2711571	439623,1242003	0357	01132,77694,2892581	472795,0522654
0308	00909,11923,3953574	440314,6626968	0358	01137,50459,3415235	473431,2914331
0309	00913,52238,0580543	441004,9697542	0359	01142,23920,6329565	474066,5399263
0310	00917,93243,0278085	441694,0511463	0360	01146,97987,1728828	474700,8017222
0311	00922,34937,0789548	442381,9126004	0361	01151,72687,9746050	475334,0807705
0312	00926,77318,9915552	443068,5597987	0362	01156,48022,0553755	475966,3809940
0313	00931,20387,5513539	443753,9983776	0363	01161,23988,4363695	476597,7062885
0314	00935,64141,5497316	444438,2339293	0364	01166,00586,1426581	477228,0605232
0315	00940,08579,7836609	445121,2720015	0365	01170,77814,2031813	477857,4475409
0316	00944,53701,0556624	445803,1180985	0366	01175,55671,6507222	478485,8711584
0317	00948,99504,1737610	446483,7776812	0367	01180,34157,5218806	479113,3351666
0318	00953,45987,9514422	447163,2561679	0368	01185,13270,8570472	479739,8433307
0319	00957,93151,2076102	447841,5589345	0369	01189,93010,7003779	480365,3993909
0320	00962,40992,7665447	448518,6913153	0370	01194,73376,0997688	480990,0070617
0321	00966,89511,4578601	449194,6586030	0371	01199,54366,1068305	481613,6700332
0322	00971,38706,1164631	449869,4660498	0372	01204,35979,7768637	482236,3919706
0323	00975,88575,5825129	450543,1188670	0373	01209,18216,1688343	482858,1765148
0324	00980,39118,7013800	451215,6222262	0374	01214,01074,3453491	483479,0272824
0325	00984,90334,2360662	451886,9812593	0375	01218,84553,3725315	484098,9478660
0326	00989,42221,3048655	452557,2010591	0376	01223,68652,3204975	484717,9418347
0327	00993,94778,5059246	453226,2866795	0377	01228,53370,2623322	485336,0127338
0328	00998,48004,7926041	453894,2431364	0378	01233,38706,2750660	485953,1640853
0329	01003,01899,0357405	454561,0754073	0379	01238,24659,4391513	486569,3993883
0330	01007,56460,1111478	455226,7843226	0380	01243,11228,8385396	487184,7221189
0331	01012,11686,8995804	455891,3871155	0381	01247,98413,5606585	487799,1357306
0332	01016,67578,2866285	456554,8763223	0382	01252,86212,6963891	488412,6436542
0333	01021,24133,1630182	457217,2608829	0383	01257,74625,3407433	489025,2492985
0334	01025,81350,4239011	457878,5455917	0384	01262,63605,5893418	489636,9560502
0335	01030,39228,9694928	458538,7352069	0385	01267,53287,5453920	490247,7672739
0336	01034,97767,7046997	459197,8344519	0386	01272,43535,3126659	490857,6863130
0337	01039,56965,5391516	459855,8480151	0387	01277,34392,9989789	491466,7164888
0338	01044,16821,3871667	460512,7805503	0388	01282,25859,7154677	492074,8611021
0339	01048,77334,1677170	461168,6366774	0389	01287,17934,5765698	492682,1234318
0340	01053,38502,8043944	461823,4209823	0390	01292,10616,7000016	493288,5067366
0341	01058,00326,2253767	462477,1380176	0391	01297,03905,2067382	493894,0142540
0342	01062,62803,3633943	463129,7923026	0392	01301,97799,2209922	494498,6492013
0343	01067,25933,1556969	463781,3883240	0393	01306,92297,8701935	495102,4147753
0344	01071,89714,5440209	464431,9305361	0394	01311,87400,2849688	495705,3141527
0345	01076,54146,4745570	465081,4233610	0395	01316,83175,5991215	496307,3504901
0346	01081,19227,8979180	465729,8711889	0396	01321,79412,9496116	496908,5269244
0347	01085,84957,7691069	466377,2783789	0397	01326,76321,4765360	497508,8465731
0348	01090,51335,0474858	467023,6492586	0398	01331,73830,3231091	498108,3125336
0349	01095,18358,6967444	467668,9881248	0399	01336,71938,6356427	498706,9278847
0350	01099,86027,6848692	468313,4992441	0400	01341,70645,5635274	499304,6956857

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Verf. Sine.	Area Segment.	Difference.	Verf. Sine.	Area Segment.	Difference.
0401	01346,69950,2592131	499901,6189770	0451	01633,79448,0023848	528733,1539742
0402	01351,69851,8781901	500497,7007803	0452	01609,08181,1563590	529290,6416788
0403	01356,70349,5789704	501092,9440985	0453	01614,37471,7980378	529347,4204284
0404	01361,71442,5230689	501687,3519163	0454	01619,67319,2184662	530403,4924556
0405	01366,73129,8749851	502280,9271998	0455	01624,97722,7109218	530958,8599808
0406	01371,75410,8021849	502873,6728972	0456	01630,28681,5709026	531513,5252126
0407	01376,78284,4750821	503465,5919384	0457	01635,60195,0961152	532067,4903462
0408	01381,81750,0670205	504056,6872360	0458	01640,92262,5864621	532623,7575686
0409	01386,85806,7542566	504646,9616843	0459	01645,24883,3440307	533173,3290502
0410	01391,90453,7159409	505236,4181604	0460	01651,58056,6730809	533725,2069525
0411	01396,95690,1341013	505825,0595240	0461	01656,91781,8800334	534276,3934250
0412	01402,01515,1936253	506412,8886173	0462	01662,26058,2734584	534826,8906053
0413	01407,07928,0822426	506999,9082659	0463	01667,60885,1640637	535376,7006198
0414	01412,14927,9905085	507586,1212779	0464	01672,96261,8646835	535925,8255831
0415	01417,22514,1117864	508171,5304450	0465	01678,32187,6902666	536474,2675992
0416	01422,30685,6422314	508756,1385420	0466	01683,68661,9578658	537022,0287603
0417	01427,39441,7807734	509339,9483273	0467	01689,05683,9866261	537569,1111477
0418	01432,48781,7291007	509922,9625428	0468	01694,43253,0977738	538115,5168318
0419	01437,58704,6916435	510505,1839142	0469	01699,81368,5146057	538661,2478718
0420	01442,69209,8755577	511086,6151512	0470	01705,20029,8624775	539206,3063161
0421	01447,80296,4907089	511667,2589474	0471	01710,59236,1687936	539750,6942024
0422	01452,91963,7496563	512247,1179803	0472	01715,98986,8629960	540294,4135574
0423	01458,04210,8676367	512826,1949122	0473	01721,39281,2755534	540837,4663977
0424	01463,17037,0625489	513404,4923895	0474	01726,80118,7429512	541379,8547289
0425	01468,30441,5549383	513982,0130430	0475	01732,21498,5976801	541921,5805462
0426	01473,44423,5679813	514558,7594835	0476	01737,63420,1782263	542462,6458344
0427	01478,58982,3274698	515134,7343263	0477	01743,05882,8240607	543003,0525682
0428	01483,74117,0617962	515709,9401418	0478	01748,48885,8766289	543542,8027116
0429	01488,89827,0019380	516284,3795055	0479	01753,92428,6793405	544081,8982190
0430	01494,06111,3814435	516858,0549726	0480	01759,36510,5775595	544620,3410341
0431	01499,22969,4364161	517430,9690842	0481	01764,81130,9185936	545158,1330910
0432	01504,40400,4055003	518003,1243662	0482	01770,26289,0516846	545695,2763138
0433	01509,58403,5298665	518574,5233307	0483	01775,71984,3279984	546231,7726164
0434	01514,76978,0531972	519145,1684746	0484	01781,18216,1006148	546767,6239033
0435	01519,96123,2216718	519715,0622813	0485	01786,64983,7245181	547302,8320689
0436	01525,15838,2839531	520284,2072196	0486	01792,12286,5565870	547837,3989981
0437	01530,36122,4911727	520852,6057444	0487	01797,60123,9555851	548371,3265663
0438	01535,56975,0969171	521420,2602968	0488	01803,08495,2821514	548904,6166392
0439	01540,78395,3572139	521987,1733038	0489	01808,57399,8987907	549437,2710731
0440	01546,02382,5305177	522553,3471790	0490	01814,06837,1698638	549969,2917148
0441	01551,22935,8776967	523118,7843224	0491	01819,56806,4615786	550500,6804020
0442	01556,46054,6620191	523683,4871202	0492	01825,07307,1419806	551031,4389627
0443	01561,69738,1491393	524247,4579455	0493	01830,58338,5809433	551561,5692163
0444	01566,93985,6070848	524810,6991583	0494	01836,09900,1501597	552091,0729726
0445	01572,18796,3062431	525373,2131049	0495	01841,61991,2231323	552619,9520325
0446	01577,44169,5193480	525935,0021190	0496	01847,14611,1751648	553148,2081878
0447	01582,70104,5214670	526496,0685212	0497	01852,67759,3833526	553675,8432215
0448	01587,96600,5899882	527056,4146191	0498	01858,21435,2265742	554202,8589076
0449	01593,23657,0046073	527616,0427079	0499	01863,75638,0854818	554729,2570114
0450	01598,51273,0473152	528174,9550696	0500	01869,30367,3424932	555255,0392892

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
0501	01874,85622,3817824		0551	02159,05625,2976912	581291,9246237
0502	01880,41402,5892713	555780,2074889	0552	02164,86917,2223149	581787,9061623
0503	01885,97707,3526209	556304,7633496	0553	02170,68705,1284772	582283,3538659
0504	01891,54536,0612227	556828,7086018	0554	02176,50988,4823431	582778,2690963
0505	01897,11888,1061902	557352,0449675	0555	02182,33766,7514394	583272,6532086
		557874,7741604			
0506	01902,69762,8803506		0556	02188,17039,4046480	583766,5075523
0507	01908,28159,7782361	558396,8978855	0557	02194,00805,9122003	584259,8334709
0508	01913,87078,1960759	558918,4178398	0558	02199,85065,7456713	584752,6323017
0509	01919,46517,5317877	559439,3357118	0559	02205,69818,3779730	585244,9053763
0510	01925,06477,1849694	559959,6531817	0560	02211,55063,2833493	585736,6540201
		560479,3719217			
0511	01930,66956,5568912		0561	02217,40799,9373694	586227,8795530
0512	01936,27955,0504871	560998,4935959	0562	02223,27027,8169224	586718,5832889
0513	01941,89472,0703473	561517,0198602	0563	02229,13746,4002113	587208,7665358
0514	01947,51507,0227098	562034,9523625	0564	02235,00955,1667471	587698,4305962
0515	01953,14059,3154527	562552,2927429	0565	02240,88653,5973433	588187,5767667
		563069,0426334			
0516	01958,77128,3580862		0566	02246,76841,1741100	588676,2063383
0517	01964,40713,5617445	563585,2036584	0567	02252,65517,3804483	589164,3205964
0518	01970,04814,3391788	564100,7774342	0568	02258,54681,7010448	589651,9208207
0519	01975,69430,1047484	564615,7655696	0569	02264,44333,6218654	590139,0082852
0520	01981,34560,2744141	565130,1696657	0570	02270,34472,6301507	590625,5842588
		565643,9913158			
0521	01987,00204,2657299		0571	02276,25098,2144096	591111,6500044
0522	01992,66361,4978357	566157,2321058	0572	02282,16209,8644140	591597,2067797
0523	01998,33031,3914495	566669,8936138	0573	02288,07807,0711937	592082,2558370
0524	02004,20213,3688604	567181,9774109	0574	02293,99889,3270307	592566,7984229
0525	02009,67906,8539206	567693,4850602	0575	02299,92456,1254536	593050,8357788
		568204,4181178			
0526	02015,36111,2720384		0576	02305,85506,9612324	593534,3691410
0527	02021,04826,0501706	568714,7781322	0577	02311,79041,3303734	594017,3997400
0528	02026,74050,6168156	569224,5666450	0578	02317,73058,7301134	594499,9288015
0529	02032,43784,4020057	569733,7851901	0579	02323,67558,6589150	594981,9575456
0530	02038,14026,8373002	570242,4352945	0580	02329,62540,6164606	595463,4871874
		570750,5184780			
0531	02043,84777,3557782		0581	02335,58004,1036480	595944,5189368
0532	02049,56035,3920314	571258,0362532	0582	02341,53948,6225848	596425,0539983
0533	02055,27800,3821572	571764,9901258	0583	02347,50373,6765830	596905,0935715
0534	02061,00071,7637515	572271,3815944	0584	02353,47278,7701546	597384,6388510
0535	02066,72848,9759021	572777,2121506	0585	02359,44663,4090056	597863,6910263
		573282,4832792			
0536	02072,46131,4591814		0586	02365,42527,1000319	598342,2512815
0537	02078,19918,6556395	573787,1964581	0587	02371,40869,3513134	598820,3207962
0538	02083,94210,0087980	574291,3531584	0588	02377,39689,6721096	599297,9007447
0539	02089,69004,9636423	574794,9548443	0589	02383,38987,5728543	599774,9922966
0540	02095,44302,9666156	575298,0029733	0590	02389,38762,5651509	600251,5966163
		575800,4989964			
0541	02101,20103,4656120		0591	02395,39014,1617672	600727,7148536
0542	02106,96405,9099696	576302,4443576	0592	02401,39741,8766308	601203,3481933
0543	02112,73209,7504642	576803,8404946	0593	02407,40945,2248241	601678,4977554
0544	02118,50514,4393026	577304,6888384	0594	02413,42623,7225796	602153,1646951
0545	02124,28319,4301162	577804,9908135	0595	02419,44776,8872746	602627,3501528
		578304,7478380			
0546	02130,06624,1779542		0596	02425,47404,2374274	603101,0552642
0547	02135,85428,1392776	578803,9613234	0597	02431,50505,2926916	603574,2811602
0548	02141,64730,7719524	579302,6326748	0598	02437,54079,5738518	604047,0289673
0549	02147,44531,5352436	579800,7632912	0599	02443,58126,6028192	604519,2998070
0550	02153,24829,8898087	580298,3545651	0600	02449,62645,9026262	604991,0947962
		580795,4078825			

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
0601	02455,67636,9974225	605462,4150475	0651	02764,08527,2303442	628446,4514479
0602	02461,73099,4124700	605933,2616687	0652	02770,36973,6817921	628894,9350546
0603	02467,79032,6741387	606403,6357626	0653	02776,65868,6168467	629342,9960252
0604	02472,85436,3099013	606873,5384288	0654	02782,95211,6128719	629790,6352619
0605	02479,92309,8483301	607342,9707608	0655	02789,25002,2481338	630237,8536631
0606	02485,99652,8190909	607811,9338485	0656	02795,55240,1017969	630684,6521241
0607	02492,07464,7529394	608280,4287774	0657	02801,85921,7539210	631131,0315368
0608	02498,15745,1817168	608748,4566283	0658	02808,17055,7854578	631576,9927898
0609	02504,24493,6383451	609216,0184778	0659	02814,48632,7782476	632022,5367681
0610	02510,33709,6568229	609683,1153978	0660	02820,80655,3150157	632467,6643537
0611	02516,43392,7722207	610149,7484562	0661	02827,13122,9793694	632912,3764251
0612	02522,53542,5206770	610615,9187165	0662	02833,46035,3557946	633356,6738575
0613	02528,64158,4393935	611081,6272378	0663	02839,79392,0296521	633800,5575230
0614	02534,75240,0566313	611546,8750750	0664	02846,13192,5571751	634244,0282903
0615	02540,86786,9417063	612011,6632786	0665	02852,47436,6154654	634687,0870248
0616	02546,98798,6049849	612475,9928952	0666	02858,82123,7024902	635129,7345890
0617	02553,11274,5978801	612939,8649669	0667	02865,17253,4370792	635571,9718417
0618	02559,24214,4628469	613403,2805317	0668	02871,52825,4089209	636013,7996391
0619	02565,37617,7433786	613866,2406235	0669	02877,88839,2085601	636455,2188338
0620	02571,51483,9840021	614328,7462720	0670	02884,25294,4273939	636896,2302753
0621	02577,65812,7302741	614790,7985030	0671	02890,62190,6476692	637336,8348102
0622	02583,80603,5287771	615252,3983378	0672	02896,99527,4924794	637777,0332817
0623	02589,95855,9271149	615713,5467940	0673	02903,37304,5257611	638216,8265302
0624	02596,11569,4739089	616174,2448851	0674	02909,75521,3522913	638656,2153925
0625	02602,27743,7187940	616634,4936205	0675	02916,14177,5676838	639095,2007030
0626	02608,44378,2124145	617094,2940055	0676	02922,53272,7683868	639533,7832926
0627	02614,61472,5064200	617553,6470418	0677	02928,92806,5516795	639971,9639893
0628	02620,79026,1534618	618012,5537266	0678	02935,32778,5156688	640409,7436180
0629	02626,97038,7071884	618471,0150538	0679	02941,73188,2592868	640847,1230006
0630	02633,15509,7222422	618929,0320128	0680	02948,14035,3822874	641284,1029562
0631	02639,34438,7542550	619386,6055896	0681	02954,55319,4852436	641720,6843006
0632	02645,53825,3598446	619843,7367660	0682	02960,97040,1695442	642156,8678469
0633	02651,73669,0966107	620300,4265202	0683	02967,39197,0373912	642592,6544052
0634	02657,93969,5231309	620756,6758263	0684	02973,81789,6917964	643028,0447825
0635	02664,14726,1989572	621212,4856549	0685	02980,24817,7365789	643463,0397832
0636	02670,35938,6846121	621667,8569726	0686	02986,68280,7763621	643897,6402083
0637	02676,57606,5415847	622122,7907423	0687	02993,12178,4165704	644331,8468566
0638	02682,79729,3323270	622577,2879234	0688	02999,56510,2634270	644765,6605234
0639	02689,02306,6202504	623031,3494710	0689	03006,01275,9239504	645199,0820014
0640	02695,25337,9697214	623484,9763372	0690	03012,46475,0059518	645632,1120806
0641	02701,48822,9460587	623938,1694699	0691	03018,92107,1180324	646064,7515478
0642	02707,72761,1155286	624390,9298137	0692	03025,33171,8695802	646497,0011874
0643	02713,97152,0453423	624843,2583091	0693	03031,84668,8707676	646928,8617807
0644	02720,21995,3036514	625295,1558936	0694	03038,31597,7325483	647360,3341063
0645	02726,47290,4595451	625746,6235006	0695	03044,78958,0666546	647791,4189401
0646	02732,73037,0830457	626197,6620602	0696	03051,26742,4855947	648222,1170550
0647	02738,99234,7451059	626648,2724988	0697	03057,74971,6026497	648652,4292216
0648	02745,25883,0176047	627098,4557391	0698	03064,23624,0318713	649082,3562074
0649	02751,52981,4733438	627548,2127008	0699	03070,72706,3880787	649511,8987771
0650	02757,80529,6860446	627997,5442996	0700	03077,22218,2868558	649941,0576931

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
0701	03083,72159,3445489	650369,8337148	0751	03414,08126,1007492	671336,4811259
0702	03090,22529,1782637	650798,2275990	0752	03420,79462,5818752	671746,6775289
0703	03095,73327,4058627	651226,2400998	0753	03427,51209,2594041	672156,5271277
0704	03103,24553,6459625	651653,8719688	0754	03434,23365,7865318	672566,0305565
0705	03109,76207,5179313	652081,1239549	0755	03440,95931,8170883	672975,1884472
0706	03116,28288,6418862	652507,9968040	0756	03447,68907,0055355	673384,0014296
0707	03122,80796,6386902	652934,4912601	0757	03454,42291,0069652	673792,4701315
0708	03129,33731,1299503	653360,6080640	0758	03461,16083,4770967	674200,5951788
0709	03135,87091,7380143	653786,3479541	0759	03467,90284,0722755	674608,3771950
0710	03142,40878,0852684	654211,7116664	0760	03474,64892,4494705	675015,8168020
0711	03148,95089,7976348	654636,6999340	0761	03481,39908,2662725	675422,9146192
0712	03155,49726,4975688	655061,3134878	0762	03488,15331,1808917	675829,6712645
0713	03162,04787,8110566	655485,5530559	0763	03494,91160,8521562	676236,0873534
0714	03168,60273,3641126	655909,4193641	0764	03501,67396,9395096	676642,1634996
0715	03175,16182,7834767	656332,9131355	0765	03508,44039,1030092	677047,9003147
0716	03181,72515,6966122	656756,0350907	0766	03515,21087,0033239	677453,2984086
0717	03188,29271,7317028	657178,7859479	0767	03521,98540,3017325	677858,3583888
0718	03194,86450,5176507	657601,1664229	0768	03528,76398,6601213	678263,0808611
0719	03201,44051,5840736	658023,1772288	0769	03535,54661,7409824	678667,4664295
0720	03208,02074,8613023	658444,8190765	0770	03542,33329,2074119	679071,5156955
0721	03214,60519,6803788	658866,0926742	0771	03549,12400,7231074	679475,2292595
0722	03221,19385,7730530	659286,9987280	0772	03555,91875,9523669	679878,6077192
0723	03227,78672,7717810	659707,5379413	0773	03562,71754,5600862	680281,6516709
0724	03234,38380,3097224	660127,7110152	0774	03569,52036,2117571	680684,3617086
0725	03240,98508,0207376	660547,5186485	0775	03576,32720,5734657	681086,7384248
0726	03247,59055,5393861	660966,9615373	0776	03583,13807,3118905	681488,7824799
0727	03254,20022,5009234	661386,0403758	0777	03589,95296,0943004	681890,4942522
0728	03260,81408,5412992	661804,7558555	0778	03596,77186,5885526	682291,5745387
0729	03267,43213,2971547	662223,1086654	0779	03603,59478,4530914	682692,9234540
0730	03274,05436,4058201	662641,0994929	0780	03610,42171,3869454	683093,6427811
0731	03280,68077,5053130	663058,7290220	0781	03617,25265,0297265	683494,0319010
0732	03287,31136,2343350	663475,9979355	0782	03624,08759,0616275	683894,0917932
0733	03293,94612,2322705	663892,2069131	0783	03630,92653,1534207	684293,8230349
0734	03300,58505,1391836	664309,4566324	0784	03637,76946,9764556	684693,2262018
0735	03307,22814,5958160	664725,6477690	0785	03644,61640,2026575	685092,3018677
0736	03313,87540,2435850	665141,4809957	0786	03651,46732,5045252	685491,0506046
0737	03320,52681,7245807	665556,9569838	0787	03658,32223,5551298	685889,4729826
0738	03327,18238,6815645	665972,0764015	0788	03665,18113,0281124	686287,5695703
0739	03333,84210,7579660	666386,8399153	0789	03672,04400,5976827	686685,53409340
0740	03340,50597,5978813	666801,2481895	0790	03678,91085,9386167	687082,7876389
0741	03347,17398,8460708	667215,3018858	0791	03685,78168,7262556	687479,9124278
0742	03353,84614,1479566	667629,0016640	0792	03692,65648,6365034	687876,7093221
0743	03360,52243,1496206	668042,3481816	0793	03699,53525,3458255	688273,1854216
0744	03367,20285,4978022	668455,3420939	0794	03706,41798,5312471	688669,3391036
0745	03373,88740,8398961	668867,9840542	0795	03713,30467,8703507	689065,1709248
0746	03380,57608,8239503	669280,2747133	0796	03720,19533,0412755	689460,6814391
0747	03387,26889,0986636	669692,2147201	0797	03727,08993,7227146	689855,8711993
0748	03393,96581,3133837	670103,8047213	0798	03733,98849,5939139	690250,7407563
0749	03400,66685,1181050	670515,0453614	0799	03740,89100,3346702	690645,2906595
0750	03407,37200,1634664	670925,9372828	0800	03747,79745,6253297	691039,5214561

<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>	<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>
0801	03754,70785,1467858	691433,4336922	0851	04105,18508,3953520	710734,4705617
0802	03761,62218,5804780	691827,0279117	0852	04112,29242,8559137	711112,8225594
0803	03768,54045,6083897	692220,3046574	0853	04119,40355,6884731	711490,8822191
0804	03775,46265,9130471	692613,2644697	0854	04126,51846,5706922	711868,6500067
0805	03782,38879,1775168	693005,9078881	0855	04133,63715,2206989	712246,1263865
0806	03789,31885,0854049	693398,2354499	0856	04140,75961,3470954	712623,3118217
0807	03796,25283,3208548	693790,2476910	0857	04147,88584,5589071	713000,2067739
0808	03803,19073,5685458	694181,9451455	0858	04155,01584,8656810	713376,8117036
0809	03810,13255,5136912	694573,3283460	0859	04162,14961,6773846	713753,1270699
0810	03817,07828,8420373	694964,3978235	0860	04169,28714,8044545	714129,1533305
0811	03824,02793,2398608	695355,1541073	0861	04176,42843,9577850	714504,8909418
0812	03830,98148,3939681	695745,5977250	0862	04183,57348,6487268	714880,3403591
0813	03837,93893,9916931	696135,7292729	0863	04190,72223,1890859	715255,5020361
0814	03844,90029,7208960	696525,5490653	0864	04197,87484,6911220	715630,3761254
0815	03851,86555,2699613	696915,0578352	0865	04205,73115,0675474	716004,9639782
0816	03858,83470,3277965	697304,2560338	0866	04212,19120,0315256	716379,2651445
0817	03865,80774,5838303	697693,1441811	0867	04219,35499,2966701	716753,2803729
0818	03872,78467,7280115	698081,7227951	0868	04226,52252,5770430	717127,0101109
0819	03879,76549,4508066	698469,3923924	0869	04233,69379,5871539	717500,4548044
0820	03886,75019,4431990	698857,9534880	0870	04240,86880,0419583	717873,6148985
0821	03893,73877,3966870	699245,6065956	0871	04248,04753,6568568	718246,4908367
0822	03900,73123,0032826	699632,9522270	0872	04255,23000,1476935	718619,0830613
0823	03907,72755,9555096	700019,9908925	0873	04262,41619,2307548	718991,3920133
0824	03914,72775,9464021	700406,7231013	0874	04269,60610,6227681	719363,4181326
0825	03921,73182,6695034	700793,1493604	0875	04276,79974,0409007	719735,1618579
0826	03928,73975,8188638	701179,2701759	0876	04283,99709,2027586	720106,6236263
0827	03935,75155,0890395	701565,0860520	0877	04291,19815,8263849	720477,8038742
0828	03942,76723,1750918	701950,5974916	0878	04298,47293,6302591	720848,7030363
0829	03949,78670,7725833	702335,8049959	0879	04305,61142,3332954	721219,3215461
0830	03956,81006,5775792	702720,7090647	0880	04312,82361,6548415	721589,6598364
0831	03963,83727,2866439	703105,3101965	0881	04320,03951,3146779	721959,7183382
0832	03970,86832,5968404	703489,6088881	0882	04327,25911,0330162	722329,4974816
0833	03977,90322,2057285	703873,6056347	0883	04334,48240,5304978	722698,9976954
0834	03984,94195,8113632	704257,3009305	0884	04341,70939,5281932	723068,2194072
0835	03991,98453,1122937	704640,6952677	0885	04348,94007,7476004	723437,1630433
0836	03999,03093,8075614	705023,7891373	0886	04356,17444,9106437	723805,8290292
0837	04006,08117,5966987	705406,5830291	0887	04363,41250,7396729	724174,2177887
0838	04013,13524,1797278	705789,0774308	0888	04370,65424,9574616	724542,3297448
0839	04020,19313,2571586	706171,2728294	0889	04377,89967,2872064	724910,1653191
0840	04027,25484,5299880	706553,1697099	0890	04385,14877,4525255	725277,7249322
0841	04034,32037,6996979	706934,7685562	0891	04392,40155,1774577	725645,7090033
0842	04041,38972,4682541	707316,0698506	0892	04399,65800,1864610	726012,0179507
0843	04048,46288,5381047	707697,0740741	0893	04406,91812,2044117	726378,7521915
0844	04055,53985,6121789	708077,7817063	0894	04414,18190,9566032	726745,2121414
0845	04062,62063,3938852	708458,1932252	0895	04421,44936,1687445	727111,3982152
0846	04069,70521,5871104	708838,3091077	0896	04428,72047,5669597	727477,3108265
0847	04076,79359,8962181	709218,1298290	0897	04435,99524,8777862	727842,9503877
0848	04083,88578,0260471	709597,6558631	0898	04443,27367,8281739	728208,3173101
0849	04090,98175,6819102	709976,8876828	0899	04450,55576,1454840	728573,4120039
0850	04098,08152,5695930	710355,8257590	0900	04457,84149,5574879	728938,2348782

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
0901	04465,13087,7923661	729302,7863407	0951	04834,19257,8242686	747193,0090706
0902	04472,42330,5787068	729667,0667986	0952	04841,66450,8333392	747544,2344453
0903	04479,72057,6455054	730031,0766572	0953	04849,13995,0677845	747895,2081742
0904	04487,02088,7221626	730394,8163212	0954	04856,61890,2759587	748245,9376111
0905	04494,32483,5384838	730758,2861941	0955	04864,10136,2065698	748596,4021094
0906	04501,63241,8246779	731121,4866784	0956	04871,58732,6086792	748946,6230214
0907	04508,94363,3113562	731484,4181751	0957	04879,07679,2317006	749296,5936983
0908	04516,25847,7295313	731847,0810846	0958	04886,56975,8253989	749646,3144907
0909	04523,57694,8106159	732209,4758059	0959	04894,06622,1398896	749995,7857481
0910	04530,59904,2864218	732571,6027370	0960	04901,56617,9256377	750345,0078193
0911	04538,22475,8891588	732933,4622749	0961	04909,06962,9334570	750693,9810519
0912	04545,55409,3514337	733295,0548154	0962	04916,57656,9145089	751042,7057929
0913	04552,88704,4062491	733656,3807533	0963	04924,08699,6203018	751391,1823880
0914	04560,22360,7870024	734017,4404823	0964	04931,60090,8026898	751739,4111827
0915	04567,56378,2274847	734378,2343950	0965	04939,11830,2138725	752087,3925209
0916	04574,90756,4618797	734738,7628831	0966	04946,63917,6063934	752435,1267460
0917	04582,25495,2247628	735099,0263371	0967	04954,16352,7331394	752782,6142006
0918	04589,60594,2510999	735459,0251464	0968	04961,69135,3473400	753129,8552261
0919	04596,96053,2762463	735818,7596995	0969	04969,22265,2025661	753476,8501632
0920	04604,31872,0359458	736178,2303837	0970	04976,75742,0527294	753823,5993518
0921	04611,68053,2663295	736537,4375855	0971	04984,29565,6520812	754170,1031310
0922	04619,04587,7039151	736895,3816901	0972	04991,83735,7552122	754516,3618386
0923	04626,41484,0856052	737255,0630818	0973	04999,38252,1170508	754862,3758120
0924	04633,78739,1486870	737613,34821439	0974	05006,93114,4928628	755208,1453877
0925	04641,16352,6308309	737971,6392585	0975	05014,44832,5382505	755553,6709011
0926	04648,54324,2700894	738329,5348070	0976	05022,03876,3091516	755898,9526869
0927	04655,92653,8048964	738687,1691694	0977	05029,59775,2618385	756243,9910789
0928	04663,31340,9740658	739044,5427250	0978	05037,16019,2529174	756588,7864102
0929	04670,70385,5167908	739401,6553519	0979	05044,72608,0393276	756933,3390130
0930	04678,09787,1726427	739758,5089272	0980	05052,29541,3783406	757277,6492184
0931	04685,49545,6815699	740115,1023272	0981	05059,86819,0275590	757621,7173571
0932	04692,89660,7838971	740471,4364270	0982	05067,44440,7449161	757965,5437586
0933	04700,30132,2273241	740827,5116008	0983	05075,02406,2886747	758309,1287518
0934	04707,70959,7319249	741183,3282217	0984	05082,60715,4174265	758652,4726646
0935	04715,12143,0601466	741538,8866619	0985	05090,19367,8900911	758995,5758243
0936	04722,53681,9458085	741894,1872927	0986	05097,78363,4659155	759338,4385572
0937	04729,95576,1341012	742249,2304842	0987	05105,37701,9044727	759681,0611888
0938	04737,37825,3645854	742604,0166057	0988	05112,97382,9656614	760023,4440438
0939	04744,80429,3811911	742958,5460255	0989	05120,57406,4097053	760365,5874462
0940	04752,23387,9272167	743312,8191109	0990	05128,17771,9971515	760707,4917190
0941	04759,66700,7463276	743666,8362283	0991	05135,78479,4888704	761049,1571845
0942	04767,10367,5825559	744020,5977430	0992	05143,39528,6460550	761390,5841643
0943	04774,54388,1802989	744374,1040193	0993	05151,00919,2302192	761731,7729790
0944	04781,98762,2843182	744727,3554210	0994	05158,62651,0031981	762072,3922578
0945	04789,43489,6397392	745080,3523103	0995	05166,24723,7271464	762413,4373917
0946	04796,88569,9920495	745433,0950489	0996	05173,87137,1645381	762753,9136271
0947	04804,34003,0870984	745785,5839975	0997	05181,49891,0781652	763094,1529723
0948	04811,79788,6710959	746137,8195156	0998	05189,12985,2311376	763434,1557439
0949	04819,25926,4906115	746489,8019622	0999	05196,76419,3868815	763773,9222578
0950	04826,72416,2925737	746841,3516949	1000	05204,40193,3091393	764113,4528293

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
1001	05212,04306,7619686	764452,7477727	1051	05598,37756,4449607	781123,7971636
1002	05219,68759,5097413	764791,8074015	1052	05606,18880,2421243	781451,4745200
1003	05227,33551,3171428	765130,6320287	1053	05614,00321,7166443	781778,9315866
1004	05234,98681,9491715	765469,2219662	1054	05621,82110,6482309	782106,1686000
1005	05242,64151,1711377	765807,5775255	1055	05629,64216,8168709	782433,1859562
1006	05250,29958,7486633	766145,6990170	1056	05637,46650,0028271	782759,9538107
1007	05257,96104,4476803	766483,5867505	1057	05645,29409,9866378	783086,5624782
1008	05265,62588,0344308	766821,2410349	1058	05653,12496,5491160	783412,9222328
1009	05273,29403,2754657	767158,6621786	1059	05660,95909,4713488	783739,0633481
1010	05280,96567,9376443	767495,8504890	1060	05668,79648,5346969	784064,9860968
1011	05288,64063,7881333	767832,8062729	1061	05676,63713,5207937	784390,6907511
1012	05296,31896,5944062	768169,5298362	1062	05684,48104,2115448	784716,1775827
1013	05304,00066,1242424	768506,0214842	1063	05692,32820,3891275	785041,4458623
1014	05311,68572,1457266	768842,2815215	1064	05700,17861,8359898	785366,4988605
1015	05319,37414,4272481	769178,3102516	1065	05708,03228,3348503	785691,3338467
1016	05327,06592,7374997	769514,1079778	1066	05715,88919,6686971	786015,9520902
1017	05334,76106,8454775	769849,6750023	1067	05723,74935,5207873	786340,3538592
1018	05342,45956,5204795	770185,0116265	1068	05731,61275,9746465	786664,5394217
1019	05350,16141,5321063	770520,1181514	1069	05739,47940,5140682	786988,5090448
1020	05357,86661,6502577	770854,9948770	1070	05747,34929,0231130	787312,2629950
1021	05365,57516,6451347	771189,6421027	1071	05755,22241,2861081	787635,8015384
1022	05373,28706,2872374	771524,0601271	1072	05763,09877,0876465	787959,1249403
1023	05381,00230,3473645	771858,2492480	1073	05770,97836,2125868	788282,2334653
1024	05388,72088,5966125	772192,2097629	1074	05778,86118,4460521	788605,1273776
1025	05396,44280,8063754	772525,9419680	1075	05786,74723,5734297	788927,8069408
1026	05404,16806,7483434	772859,4461592	1076	05794,63651,3803705	789250,2724177
1027	05411,89666,1945026	773192,7226314	1077	05802,52901,6527882	789572,5240707
1028	05419,62588,9171340	773525,7716792	1078	05810,42474,1768589	789894,5621613
1029	05427,36384,6888132	773858,5935960	1079	05818,32368,7390202	790216,3869508
1030	05435,10243,2824092	774191,1886749	1080	05826,22585,1259711	790537,9986997
1031	05442,84434,4710841	774523,5572079	1081	05834,13123,1246708	790859,3976678
1032	05450,58958,0282920	774855,6994867	1082	05842,03982,5223385	791180,5841144
1033	05458,33813,7277787	775187,6158021	1083	05849,95163,1064529	791501,5582983
1034	05465,09001,3435808	775519,3064443	1084	05857,86664,6647512	791822,3204776
1035	05473,84520,6500251	775850,7717026	1085	05865,78486,9852288	792142,8709099
1036	05481,60371,4217277	776182,0118657	1086	05873,70629,8561387	792463,2098520
1037	05489,36553,4335935	776513,0272219	1087	05881,63093,0659907	792783,3375604
1038	05497,13066,4608154	776843,8180585	1088	05889,55876,4035511	793103,2542909
1039	05504,89910,2788739	777174,3846620	1089	05897,48979,6578421	793422,9602986
1040	05512,67084,6635359	777504,7273186	1090	05905,42402,6181407	793742,4558383
1041	05520,44589,3908544	777834,8463135	1091	05913,36145,0739790	794061,7411638
1042	05528,22424,2371679	778164,7419314	1092	05921,30206,8151428	794380,8165288
1043	05536,00588,9790994	778494,4144564	1093	05929,24587,6316716	794699,6821860
1044	05543,79083,3935557	778823,8641716	1094	05937,19287,3138576	795018,3383880
1045	05551,57907,2577273	779153,0913598	1095	05945,14305,6522456	795336,7853863
1046	05559,37060,3490871	779482,0963028	1096	05953,09642,4376319	795655,0234322
1047	05567,16542,4453899	779810,8792820	1097	05961,05297,4610641	795973,0527763
1048	05574,96353,3246719	780139,4405781	1098	05969,01270,5138404	796290,8736687
1049	05582,76492,7652500	780467,7804709	1099	05976,97561,3875091	796608,4863588
1050	05590,56960,5457209	780795,8992398	2000	05984,94169,8738679	796925,8910957

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Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
1101	05992,91095,7649635	797243,0881276	1151	06395,37556,7613195	812843,4466740
1102	06000,88338,8530912	797560,0777024	1152	06403,50400,2079935	813150,3675346
1103	06008,85898,9307936	797876,8600673	1153	06411,63550,5755281	813457,0928766
1104	06016,83775,7908610	798193,4354693	1154	06419,77007,6684047	813763,6229212
1105	06024,81969,2263303	798509,8041541	1155	06427,90771,2913259	814069,9578888
1106	06032,80479,0304844	798825,9663676	1156	06436,04841,2492147	814376,0979998
1107	06040,79304,9968521	799141,9223548	1157	06444,19217,3472145	814682,0434737
1108	06048,78446,9192069	799457,6723603	1158	06452,33899,3906882	814987,7945297
1109	06056,77904,5915672	799773,2166278	1159	06460,48887,1852179	815293,3513867
1110	06064,77677,8081950	800088,5554009	1160	06468,64180,5366046	815598,7142627
1111	06072,77766,3635959	800403,6889225	1161	06476,79779,2508673	815903,8833757
1112	06080,78170,0525184	800718,6174350	1162	06484,95683,1342430	816208,8589430
1113	06088,78888,6699534	801033,3411799	1163	06493,11891,9931860	816513,6111814
1114	06096,79922,0111333	801347,8603989	1164	06501,28405,6343674	816818,2303074
1115	06104,81269,8715322	801662,1753322	1165	06509,45223,8646748	817122,6265369
1116	06112,82932,0468644	801976,2862205	1166	06517,62346,4912117	817426,8300854
1117	06120,84908,3330850	802290,1933032	1167	06525,79773,3212971	817730,8411670
1118	06128,87198,5263882	802603,8968194	1168	06533,97504,1624651	818034,6599991
1119	06136,89802,4232076	802917,3970080	1169	06542,15538,8224642	818338,2867931
1120	06144,92719,8202156	803230,6941066	1170	06550,33977,1092573	818641,7217634
1121	06152,95950,5143222	803543,7883531	1171	06558,52518,8310207	818944,9651234
1122	06160,99474,3026753	803856,6799845	1172	06566,71463,7961441	819248,0170859
1123	06169,03350,9826598	804169,3692372	1173	06574,90711,8132300	819550,8778631
1124	06177,07520,3518970	804481,8563472	1174	06583,10262,6910931	819853,5476669
1125	06185,12072,2082442	804794,1415500	1175	06591,30116,2387600	820156,0267088
1126	06193,16796,3497942	805106,2250805	1176	06599,50272,2654688	820458,3151997
1127	06201,21902,5748747	805418,1071732	1177	06607,70737,5806685	820760,4133502
1128	06209,27320,6820480	805729,7880620	1178	06615,91490,9940186	821062,3213704
1129	06217,33050,4701100	806041,2679803	1179	06624,12553,3153890	821364,0394699
1130	06225,39091,7380903	806352,5471610	1180	06632,33917,3548589	821665,5678580
1131	06233,45444,2852513	806663,6258364	1181	06640,55582,9227169	821966,9067434
1132	06241,52107,9110878	806974,5042385	1182	06648,77549,3294603	822268,0563345
1133	06249,59082,4153263	807285,1825987	1183	06656,99817,8857948	822569,0168392
1134	06257,66367,5979250	807595,6611476	1184	06665,22386,9026340	822869,7884649
1135	06265,73963,2590726	807905,9401159	1185	06673,45256,6910989	823170,3714188
1136	06273,81869,1991885	808216,0197332	1186	06681,68427,0625177	823470,7659073
1137	06281,90085,2189217	808525,9002290	1187	06689,91897,8284250	823770,9721367
1138	06289,98611,1191507	808835,5818322	1188	06698,15668,8005617	824070,9903128
1139	06298,07446,7009829	809145,0647710	1189	06706,39739,7908746	824370,8206408
1140	06306,16591,7657539	809454,3492734	1190	06714,64110,6115154	824670,4633257
1141	06314,26046,1150274	809763,4355668	1191	06722,88781,0748411	824969,9185718
1142	06322,35809,5505941	810072,3238779	1192	06731,13750,9934130	825269,1865833
1143	06330,45881,8744721	810381,0144333	1193	06739,39020,1799963	825568,2675638
1144	06338,56262,8889054	810689,5074588	1194	06747,64888,4475601	825867,1617164
1145	06346,66952,3963642	810997,8031798	1195	06755,90455,6092765	826165,8692439
1146	06354,77950,1995440	811305,9018213	1196	06764,16621,4785204	826464,3903488
1147	06362,89256,1013653	811613,8036076	1197	06772,43085,8688692	826762,7252328
1148	06371,00869,9049729	811921,5087629	1198	06780,69848,5941020	827060,8740976
1149	06379,12791,4137358	812229,0175104	1199	06788,96909,4681996	827358,8371443
1150	06387,25020,4312462	812536,3300733	1200	06797,24268,3053439	827656,6145734

<i>Vers. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>	<i>Vers. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>
1201	06805,51924,9199173	827954,2065854	1251	07223,10377,2131019	842601,7088620
1202	06813,79879,1265027	828251,6133800	1252	07231,52978,9219639	842890,1008345
1203	06822,08130,7398827	828548,8351568	1253	07239,95869,0227985	843178,3172625
1204	06830,36679,5750395	828845,8721147	1254	07248,39047,3400610	843466,3583255
1205	06838,65525,4471542	829142,7244524	1255	07256,82513,6983865	843754,2242035
1206	06846,94668,1716066	829439,3923682	1256	07265,26267,9225900	844041,9150756
1207	06855,24107,5639748	829735,8760597	1257	07273,70309,8376656	844329,4311206
1208	06863,53843,4400345	830032,1757245	1258	07282,14639,2687862	844616,7725172
1209	06871,83875,6157590	830328,2915596	1259	07290,59256,0413034	844903,9394435
1210	06880,14203,9073186	830624,2237615	1260	07299,04159,9807469	845190,9320774
1211	06888,44828,1310801	830919,3725264	1261	07307,49350,9128243	845477,7505963
1212	06896,75743,1036065	831215,5380503	1262	07315,94828,6634206	845764,3951774
1213	06905,06963,6416568	831510,9205284	1263	07324,40593,0585980	846050,4659974
1214	06913,38474,5621853	831806,1201558	1264	07332,86643,9245955	846337,1632330
1215	06921,70280,6823411	832101,1371270	1265	07341,32981,0878285	846623,2870600
1216	06930,02381,8194681	832395,9716364	1266	07349,79604,3748885	846909,2376543
1217	06938,34777,7911045	832690,6238776	1267	07358,26513,6125428	847195,0151913
1218	06946,07460,4149821	832985,0940442	1268	07366,73708,6277340	847480,6198460
1219	06955,00453,5090263	833279,3823291	1269	07375,21189,2475800	847766,0517932
1220	06963,33732,8913554	833573,4882250	1270	07383,68955,2993732	848051,3112073
1221	06971,67306,3802804	833867,4140241	1271	07392,17006,6105805	848336,3982623
1222	06980,01173,7943045	834161,1578184	1272	07400,65343,0088429	848621,3131320
1223	06988,35334,9521229	834454,7204991	1273	07409,13964,3219748	848906,0559896
1224	06996,69789,0726220	834748,1022576	1274	07417,62870,3779644	849190,6270083
1225	07005,04537,7748796	835041,3032843	1275	07426,12061,0049727	849475,0263606
1226	07013,39579,0781639	835334,3237698	1276	07434,61536,0313333	849759,2542191
1227	07021,74913,4019337	835627,1639038	1277	07443,11295,2855525	850043,3107557
1228	07030,10540,5658375	835919,8238758	1278	07451,61338,5963082	850327,1961421
1229	07038,46460,3897133	836212,3038752	1279	07460,11665,7924503	850610,9105496
1230	07046,82672,6935885	836504,6040906	1280	07468,62276,7029999	850894,4541494
1231	07055,19177,2976791	836796,7247105	1281	07477,13171,1571492	851177,8271120
1232	07063,55974,0223896	837088,5659229	1282	07485,64348,9842613	851461,0296079
1233	07071,93062,6883125	837380,4279153	1283	07494,15810,0138693	851744,0618071
1234	07080,30443,1162278	837672,0108752	1284	07502,67554,0756764	852026,9238794
1235	07088,68115,1271030	837963,4149893	1285	07511,19580,9995558	852309,6159940
1236	07097,06078,5420923	838254,6404443	1286	07519,71890,6155497	852592,1383200
1237	07105,44333,1825366	838545,6874261	1287	07528,24482,7538697	852874,4910263
1238	07113,82878,8699627	838836,5561207	1288	07536,77357,2448960	853156,6742811
1239	07122,21715,4260834	839127,2467134	1289	07545,30513,9191771	853438,6882526
1240	07130,60842,6727968	839417,7593892	1290	07553,83952,6074297	853720,5331086
1241	07139,00260,4321861	839708,0943329	1291	07562,37673,1405383	854002,2090163
1242	07147,39958,5265190	839998,2517286	1292	07570,91675,3495546	854283,7161432
1243	07155,79966,7782476	840288,2317604	1293	07579,45959,0656978	854565,0546558
1244	07164,20255,0190080	840578,0346118	1294	07588,00524,1203536	854846,2247206
1245	07172,60833,0446198	840867,6604659	1295	07596,55370,3450742	855127,2265040
1246	07181,01700,7050857	841157,1095056	1296	07605,10497,5715782	855408,0601715
1247	07189,42857,8145913	841446,3819134	1297	07613,65905,6317497	855688,7258889
1248	07197,84304,1965047	841735,4778714	1298	07622,21594,3576386	855969,2238212
1249	07206,26039,6743761	842024,3975613	1299	07630,77563,5814599	856249,5541335
1250	07214,68064,0719374	842313,1411645	1300	07639,33813,1355933	856529,7169902

<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>	<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>
1301	07647,90342,8525836	856809,7125557	1351	08079,70382,7997875	870599,7355064
1302	07656,47152,5651393	857089,5409938	1352	08088,40982,5352939	870871,4099445
1303	07665,04242,1061331	857369,2024684	1353	08097,11853,9452385	871142,9252210
1304	07673,61611,3086015	857648,6971425	1354	08105,82996,8704595	871414,2814846
1305	07682,19260,0057440	857928,0251793	1355	08114,54411,1519441	871685,4788838
1306	07690,77188,0309233	858207,1867416	1356	08123,26096,6308279	871956,5175669
1307	07699,35395,2176649	858486,1819917	1357	08131,98053,1483948	872227,3975818
1308	07707,93881,3996566	858765,0110916	1358	08140,70280,5460766	872498,1193761
1309	07716,52646,4107482	859043,6742032	1359	08149,42778,6654527	872768,6827975
1310	07725,11690,0849514	859322,1714880	1360	08158,15547,3482502	873039,0880928
1311	07733,71012,2564394	859600,5031071	1361	08166,88586,4363430	873309,3354091
1312	07742,30612,7595464	859878,6692214	1362	08175,61895,7717521	873579,4248931
1313	07750,90491,4287678	860156,6699915	1363	08184,35475,1966452	873849,3566908
1314	07759,50648,0987593	860434,5055776	1364	08193,10324,5533360	874119,1309487
1315	07768,11082,6043370	860712,1761398	1365	08201,83443,6842847	874388,7478123
1316	07776,71794,7804767	860989,6818376	1366	08210,57832,4320970	874658,2074273
1317	07785,32784,4623143	861267,0228304	1367	08219,32490,6395243	874927,5099390
1318	07793,94051,4851447	861544,1992773	1368	08228,07418,1494633	875196,6554923
1319	07802,55595,6844221	861821,2113371	1369	08236,82614,8049557	875465,6442321
1320	07811,17416,8957592	862098,0591682	1370	08245,58087,4491878	875734,4763029
1321	07819,79514,9549273	862374,7429288	1371	08254,33814,9254907	876003,1518488
1322	07828,41882,0978561	862651,2627766	1372	08263,09818,0773395	876271,6710139
1323	07837,04540,9606327	862927,6188695	1373	08271,86089,7483534	876540,0339419
1324	07845,67468,5795022	863203,8113646	1374	08280,62629,7822953	876808,2407762
1325	07854,30672,3908668	863479,8404188	1375	08289,39438,0230715	877076,2916600
1326	07862,94152,2312856	863755,7061889	1376	08298,16514,3147315	877344,1867363
1327	07871,57907,9374745	864031,4088313	1377	08306,93858,5014678	877611,9261478
1328	07880,21939,3463058	864306,9485021	1378	08315,71470,4276156	877879,5100368
1329	07888,86246,2948079	864582,3253571	1379	08324,49349,9376524	878146,9385456
1330	07897,50828,6201650	864857,5395518	1380	08333,27496,8761981	878414,2118161
1331	07906,15686,1597168	865132,5912415	1381	08342,05911,0880142	878681,3299899
1332	07914,80818,7509583	865407,4805811	1382	08350,84592,4180041	878948,2932084
1333	07923,46226,2315393	865682,2077253	1383	08359,63540,7112125	879215,1016129
1334	07932,11908,4392646	865956,7728283	1384	08368,42755,8128254	879481,7553440
1335	07940,77865,2120929	866231,1760445	1385	08377,22237,5681694	879748,2545426
1336	07949,44096,3881374	866505,4175274	1386	08386,01985,8227120	880014,5993491
1337	07958,10601,8056648	866779,4974307	1387	08394,82000,4220611	880280,7899035
1338	07966,77381,3030955	867053,4159075	1388	08403,62281,2119646	880546,8263457
1339	07975,44434,7190030	867327,1731109	1389	08412,42828,0383103	880812,7088154
1340	07984,11761,8921139	867600,7691934	1390	08421,23640,7471257	881078,4374521
1341	07992,79362,6613073	867874,2043075	1391	08430,04719,1845778	881344,0123947
1342	08001,47236,8656148	868147,4786052	1392	08438,86063,1969726	881609,4337823
1343	08010,15384,3442200	868420,5922384	1393	08447,67672,6307549	881874,7017535
1344	08018,83804,9364584	868693,5453586	1394	08456,49547,3325084	882139,8164466
1345	08027,52498,4818170	868966,3381170	1395	08465,31687,1489550	882404,7779959
1346	08036,21464,8199340	869238,9706646	1396	08474,14091,9269549	882669,5855512
1347	08044,90703,7905986	869511,4431523	1397	08482,96761,5135061	882934,2422382
1348	08053,60215,2337509	869783,7557303	1398	08491,79695,7557443	883198,7451984
1349	08062,29998,9894812	870056,9085487	1399	08500,62894,5009427	883463,0956888
1350	08071,00054,8980299	870327,9017576	1400	08509,46357,5965115	883727,2934865

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
1401	08518,30084,8899980	883991,3390881	1451	08963,49972,0484888	897002,3678282
1402	08527,14076,2290861	884255,2325100	1452	08972,46974,4163170	897258,8210610
1403	08535,98331,4615962	884518,9738886	1453	08981,44233,2373780	897515,1287656
1404	08544,82850,4354848	884782,5633598	1454	08990,41748,3661436	897771,2910666
1405	08553,67632,9988446	885046,0010591	1455	08999,39512,6572102	898027,3080884
1406	08562,52678,9999037	885309,2871223	1456	09008,37546,9652986	898283,1799552
1407	08571,37988,2870260	885572,4216844	1457	09017,35830,1452538	898538,9067911
1408	08580,23560,7087104	885835,4048806	1458	09026,34369,0520439	898794,4887198
1409	08589,09396,1135910	886098,2368455	1459	09035,33163,5407637	899049,9258648
1410	08597,95494,3504365	886360,9177138	1460	09044,32213,4666295	899305,2183497
1411	08606,81855,2681503	886623,4476197	1461	09053,31518,6849793	899560,3662975
1412	08615,68478,7157700	886885,8266972	1462	09062,31079,0512768	899815,3698313
1413	08624,55364,5424672	887148,0550803	1463	09071,30894,4211082	900070,2290737
1414	08633,42512,5975475	887410,1329025	1464	09080,30964,6501818	900324,9441472
1415	08642,29922,7304500	887672,0602970	1465	09089,31289,5943291	900579,5151743
1416	08651,17594,7907470	887933,8373972	1466	09098,31869,1095034	900833,9422770
1417	08660,05528,6281442	888195,4643359	1467	09107,32703,0517804	901088,2255772
1418	08668,93724,0924801	888456,9412455	1468	09116,33791,2773576	901342,3651967
1419	08677,82181,0337256	888718,2682588	1469	09125,35133,6425544	901596,3612569
1420	08686,70899,3019845	888979,4455078	1470	09134,36730,0038113	901850,2138792
1421	08695,59878,7474923	889240,4731245	1471	09143,38580,2176905	902103,9231846
1422	08704,49119,2206169	889501,3512406	1472	09152,40684,1408752	902357,4892941
1423	08713,38620,5718575	889762,0799877	1473	09161,43041,6301692	902610,9123282
1424	08722,28382,6518452	890022,6594969	1474	09170,45652,5424975	902864,1924075
1425	08731,18405,3113421	890283,0898994	1475	09179,48516,7349050	903117,3296523
1426	08740,08688,4012415	890543,3713258	1476	09188,51634,0645573	903370,3241826
1427	08748,99231,7725673	890803,5039070	1477	09197,55004,3887399	903623,1761183
1428	08757,90035,2764744	891063,4877731	1478	09206,58627,5648583	903875,3855791
1429	08766,81098,7642475	891323,3230544	1479	09215,62503,4504374	904128,4526844
1430	08775,72422,0873019	891583,0098807	1480	09224,66631,9031218	904380,5775536
1431	08784,64005,0971826	891842,5483817	1481	09233,71012,7806574	904633,1603056
1432	08793,55847,6455644	892101,9386869	1482	09242,75645,9409810	904885,33010593
1433	08802,47949,5842513	892361,1809255	1483	09251,80531,2420403	905137,2999334
1434	08811,40310,7651769	892620,2752265	1484	09260,85668,5419737	905382,1570465
1435	08820,32931,0404034	892879,2217188	1485	09269,91057,6990202	905640,8725167
1436	08829,25810,2621222	893138,0205307	1486	09278,96698,5715369	905892,4464620
1437	08838,18948,2826529	893396,6717908	1487	09288,02591,0179989	906143,5790005
1438	08847,12344,9544437	893655,1756270	1488	09297,08734,8269994	906395,1702498
1439	08856,06000,1300707	893913,5321675	1489	09306,15130,0672492	906646,3203273
1440	08864,99913,6622382	894171,7415397	1490	09315,21776,3875765	906897,3293503
1441	08873,94085,4037779	894429,8038711	1491	09324,28673,7169268	907148,1974360
1442	08882,88515,2076490	894687,7192890	1492	09333,35821,9143528	907398,9247012
1443	08891,83202,9269380	894945,4879205	1493	09342,43220,8390640	907649,5112627
1444	08900,78148,4148585	895203,1098922	1494	09351,50870,3503267	907899,9572368
1445	08909,73351,5247507	895460,5853308	1495	09360,58770,3075634	908150,2627400
1446	08918,68812,1100815	895717,9143626	1496	09369,66920,5703036	908400,4278884
1447	08927,64530,0244441	895975,0971139	1497	09378,75320,9981020	908650,4527978
1448	08936,60505,1215580	896232,1337105	1498	09387,83971,4509898	908900,3375841
1449	08945,56737,2552685	896489,0242781	1499	09396,92871,7885739	909150,0823627
1450	08954,53226,2795466	896745,7689422	1500	09405,02021,8709366	909399,6872490

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
1501	09415,11421,5581856	909649,1523583	1551	09872,96593,7147033	921946,6823385
1502	09424,21070,7105439	909898,4778053	1552	09882,18540,3970418	922189,1671697
1503	09433,31069,1883492	910147,6637042	1553	09891,40729,5642116	922431,5179590
1504	09442,41216,8528549	910396,7101718	1554	09900,63161,0821706	922673,7348121
1505	09451,51513,5622259	910645,6173202	1555	09909,85834,8169828	922915,8178344
1506	09460,62159,1795461	910894,3852645	1556	09919,08750,6348172	923157,7671311
1507	09469,73053,5648106	911143,0141185	1557	09928,31908,4019483	923399,5828076
1508	09478,84196,5789291	911391,5039962	1558	09937,55307,9847559	923641,2649685
1509	09487,95588,0829253	911639,8550113	1559	09946,78949,2497244	923882,8137187
1510	09497,07227,9379366	911888,0672770	1560	09956,02832,0634431	924124,2291630
1511	09506,19116,0052136	912136,1409069	1561	09965,26956,2926061	924365,5114056
1512	09515,31252,1461205	912384,0760138	1562	09974,51321,8040117	924606,6605508
1513	09524,43636,2221343	912631,8727107	1563	09983,75928,4645625	924847,6767030
1514	09533,56268,0948450	912879,5311103	1564	09993,00776,1412655	925088,5599657
1515	09542,69147,6259553	913127,0513252	1565	10002,25864,7012312	925329,3104431
1516	09551,82274,6772806	913374,4334677	1566	10011,51194,0116743	925569,9282386
1517	09560,95649,1107483	913621,6776500	1567	10020,76763,9399129	925810,4134556
1518	09570,09270,7883983	913868,7839839	1568	10030,02574,3533685	926050,7661975
1519	09579,23139,5723822	914115,7525814	1569	10039,28625,1195661	926290,9866674
1520	09588,37255,3249636	914362,5835540	1570	10048,54916,1061335	926531,0746683
1521	09597,51617,9085176	914609,2770131	1571	10057,81447,1808018	926771,0306029
1522	09606,66227,1855307	914855,8330701	1572	10067,08218,2114048	927010,8544740
1523	09615,81083,0186008	915102,2518358	1573	10076,35229,0658788	927250,5463839
1524	09624,96185,2704366	915348,5334214	1574	10085,62479,6122627	927490,1064349
1525	09634,11533,8038580	915594,6779373	1575	10094,89969,7186977	927729,5347293
1526	09643,27128,4817953	915840,6854942	1576	10104,17699,2534270	927968,8313689
1527	09652,42969,1672894	916086,5562023	1577	10113,45668,0847959	928207,9964558
1528	09661,59055,7234918	916332,2901719	1578	10122,73876,0812517	928447,0300912
1529	09670,75388,0136637	916577,8875129	1579	10132,02323,1113429	928685,9323771
1530	09679,91965,9011766	916823,3483352	1580	10141,31009,0437201	928924,7034146
1531	09689,78789,2495118	917068,6727483	1581	10150,59933,7471347	929163,3433049
1532	09698,25857,9222601	917313,8608616	1582	10159,89097,0904396	929401,8521490
1533	09707,43171,7831217	917558,9127845	1583	10169,18498,9425886	929640,2300478
1534	09716,60730,6959062	917803,8286261	1584	10178,48139,1726364	929878,4771020
1535	09725,78534,5245323	918048,6084952	1585	10187,78017,5497384	930116,5934122
1536	09734,96583,1330275	918293,2525006	1586	10197,08134,2431507	930354,5790787
1537	09744,14876,3855281	918537,7607508	1587	10206,38488,8222294	930592,4342018
1538	09753,33414,1462789	918782,1333542	1588	10215,69081,2564312	930830,1588815
1539	09762,52196,2796331	919026,3704190	1589	10224,99911,4153127	931067,7532178
1540	09771,71222,6500521	919270,4720534	1590	10234,30979,1685305	931305,2173104
1541	09780,90493,1221055	919514,4383650	1591	10243,62284,3858409	931542,5512589
1542	09790,10007,5604706	919758,2694616	1592	10252,93826,9370998	931779,7551627
1543	09799,29765,8299323	920001,9654508	1593	10262,25606,6922625	932016,8291213
1544	09808,49767,7953831	920245,5264398	1594	10271,57623,5213838	932253,7732337
1545	09817,70013,3218230	920488,9525358	1595	10280,89877,2946175	932490,5875987
1546	09826,90502,2743588	920732,2438459	1596	10290,22367,8822162	932727,2723155
1547	09836,11234,5182047	920975,4004767	1597	10299,55095,1545317	932963,8274825
1548	09845,32209,9186814	921218,4223350	1598	10308,88058,9820142	933200,2531982
1549	09854,53428,3412164	921461,3101272	1599	10318,21259,2352124	933436,5495612
1550	09863,74889,6513436	921704,0633597	1600	10327,54695,7847736	933672,7166695

Verf. Sine.	Area of Segment.	Difference.	Verf. Sine.	Segment.	Difference.
1601	10336,88368,5014431	933908,7546212	1651	10806,70289,1535971	945548,1008585
1602	10346,22277,2560643	934144,5635143	1652	10816,15837,2544556	945777,5783659
1603	10355,56421,9195786	934380,1434464	1653	10825,61614,9328215	946007,1316126
1604	10364,90802,3630250	934616,0945153	1654	10835,07622,0644340	946236,4606892
1605	10374,25418,4575403	934851,0168182	1655	10844,53858,5251232	946465,6656859
1606	10383,60270,0743585	935087,0104526	1656	10854,00324,1908091	946694,7465920
1607	10392,95357,0848111	935322,2755156	1657	10863,47018,9375019	946923,7037999
1608	10402,30679,3603267	935557,4121041	1658	10872,93942,6413018	947152,5370970
1609	10411,66236,7724308	935792,4203151	1659	10882,41095,1783988	947381,2466740
1610	10421,02029,1927459	936027,3002452	1660	10891,88476,4250728	947609,8326202
1611	10430,38056,4929911	936262,0519909	1661	10901,36086,2576930	947838,2950253
1612	10439,74318,5449820	936496,6756487	1662	10910,83924,5527183	948066,6339784
1613	10449,10815,2206307	936731,1713148	1663	10920,31991,1866967	948294,8495689
1614	10458,47546,3919455	936965,5390853	1664	10929,80286,0362656	948522,9418856
1615	10467,84511,9310308	937199,7790561	1665	10939,28808,9781512	948750,9110177
1616	10477,21711,7100869	937433,8913231	1666	10948,77559,8891689	948978,7570536
1617	10486,59145,6014100	937667,8759819	1667	10958,26538,6462225	949206,4800823
1618	10495,96813,4773919	937901,7331280	1668	10967,75745,1263048	949434,0801922
1619	10505,34715,2105199	938135,4628568	1669	10977,25179,2064270	949661,5557475
1620	10514,72850,6733767	938369,0652634	1670	10986,74840,7639685	949888,9120087
1621	10524,11219,7386402	938602,5404430	1671	10996,24729,6759772	950116,1438918
1622	10533,49822,2790832	938835,8884905	1672	11005,74845,8198690	950343,2532787
1623	10542,88658,1675737	939069,1095006	1673	11015,25189,0730777	950570,2400473
1624	10552,27727,2770743	939302,2035680	1674	11024,75759,3131250	950797,1044955
1625	10561,67029,4806423	939535,1707870	1675	11034,26556,4176206	951023,8466407
1626	10571,06564,6514293	939768,0112522	1676	11043,77580,2642613	951250,4665704
1627	10580,46332,6626816	940000,7250576	1677	11053,28830,7308316	951476,9643719
1628	10589,86333,3877393	940233,122975	1678	11062,80307,6952035	951703,3401324
1629	10599,26566,7000368	940465,7730655	1679	11072,32011,0353358	951929,5939390
1630	10608,67032,4731023	940698,1074555	1680	11081,83940,6292749	952155,7258785
1631	10618,07730,5805578	940932,3155611	1681	11091,36096,3551535	952381,7360381
1632	10627,48660,8961189	941164,3974757	1682	11100,88478,0911916	952607,6245041
1633	10636,89823,2935946	941394,3532928	1683	11110,41085,7156957	952833,3913631
1634	10646,31217,6468874	941626,1831055	1684	11119,93919,1070588	953059,0367016
1635	10655,72843,8299929	941857,8870068	1685	11129,46978,1437604	953284,5606059
1636	10665,14701,7169997	942089,4650895	1686	11139,00262,7043663	953509,9631622
1637	10674,56791,1820892	942320,9174467	1687	11148,53772,6675285	953735,2444563
1638	10683,99112,0995359	942552,2441707	1688	11158,07507,9119849	953960,4045745
1639	10693,41664,3437066	942783,4453541	1689	11167,61468,3165593	954185,4436022
1640	10702,84447,7890607	943014,5210893	1690	11177,15653,7601616	954410,3616253
1641	10712,27462,3101500	943245,4714683	1691	11186,70064,1217869	954635,1587293
1642	10721,70707,7816183	943476,2965834	1692	11196,24699,2805162	954859,8349994
1643	10731,14184,0782017	943706,9965263	1693	11205,79559,1155156	955084,3905212
1644	10740,57891,0747280	943937,5713890	1694	11215,34643,5060368	955308,8253796
1645	10750,01828,6461170	944168,0212630	1695	11224,89952,3314164	955533,1396597
1646	10759,45996,6673800	944398,3462397	1696	11234,45485,4710761	955757,3334464
1647	10768,90395,0136197	944628,5464106	1697	11244,01242,8045225	955981,4068245
1648	10778,35023,5600303	944858,6218670	1698	11253,57224,2113470	956205,3598786
1649	10787,79882,1818973	945088,5726998	1699	11263,13429,5712256	956429,1926933
1650	10797,24970,7545971	945318,3990000	1700	11272,69858,7639189	956652,9053529

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
1701	11282,26511,6692718	956876,4979416	1751	11763,41759,4788948	967904,8640170
1702	11291,83388,1672134	957099,9705439	1752	11773,09664,3429118	968122,4419119
1703	11301,40488,1377573	957323,3232434	1753	11782,77786,7848237	968332,9039534
1704	11310,97811,4610007	957546,5561244	1754	11792,46126,6887771	968557,2502192
1705	11320,55358,0171251	957769,6692703	1755	11802,14683,9389963	968774,4807873
1706	11330,13127,6863954	957992,6627650	1756	11811,83458,4197836	968991,5957355
1707	11339,71120,3491604	958215,5366920	1757	11821,52450,0155191	969208,5951417
1708	11349,29335,8858524	958438,2911347	1758	11831,21658,6106608	969425,4790832
1709	11358,87774,1769871	958660,9261763	1759	11840,91084,0897440	969642,2476376
1710	11368,46435,1731635	958883,4419001	1760	11850,60726,3373816	969858,9088323
1711	11378,05318,5450636	959105,8383891	1761	11860,30585,2382639	970075,4388946
1712	11387,64424,3834528	959328,1157262	1762	11870,00660,6771585	970291,8617515
1713	11397,23752,4991790	959550,2739943	1763	11879,70952,5389101	970508,1695302
1714	11406,83302,7731733	959772,3132759	1764	11889,41460,7084403	970724,3623075
1715	11416,43075,0864492	959994,2336537	1765	11899,12185,0707478	970940,4401603
1716	11426,03069,3291029	960216,0352101	1766	11908,83125,5109082	971156,4031653
1717	11435,63285,3553130	960437,7180274	1767	11918,54281,9140735	971372,2513990
1718	11445,23723,0733404	960659,2821879	1768	11928,25654,1654725	971587,9849381
1719	11454,04382,3555283	960880,7277736	1769	11937,97242,1504106	971803,6038589
1720	11464,45263,0833019	961102,0548664	1770	11947,69045,7542695	972019,1082374
1721	11474,06365,1381683	961323,2635482	1771	11957,41064,8625069	972234,4981502
1722	11483,67688,4017165	961544,3539009	1772	11967,13299,3606571	972449,7736731
1723	11493,29232,7556174	961765,3260058	1773	11976,85749,1343303	972664,9348822
1724	11502,90998,0816232	961986,1799445	1774	11986,58414,0692124	972879,9818531
1725	11512,52984,2615677	962206,9157985	1775	11996,31294,0510656	973094,9146619
1726	11522,15191,1773662	962427,5336489	1776	12006,04388,9657274	973309,7333839
1727	11531,77618,7110151	962648,0335768	1777	12015,77698,6991113	973524,4380948
1728	11541,40266,7445920	962868,4156635	1778	12025,51223,1372061	973739,0288699
1729	11551,03135,1602555	963088,6799895	1779	12035,24962,1660760	973953,5057847
1730	11560,66228,8402450	963308,8266359	1780	12044,98915,6718607	974167,8689142
1731	11570,29532,6668809	963528,8556831	1781	12054,73083,5407749	974382,1183335
1732	11579,93068,5225640	963748,7672118	1782	12064,47465,6591084	974596,2541179
1733	11589,56810,2897758	963968,5613024	1783	12074,22061,9132263	974810,2763419
1734	11599,20778,8510782	964188,2380353	1784	12083,96872,1895682	975024,1850805
1735	11608,84967,0891135	964407,7974906	1785	12093,71896,3746487	975237,3804083
1736	11618,49374,8866041	964627,2397483	1786	12103,47134,3550569	975451,6623999
1737	11628,14002,1263524	964846,5648885	1787	12113,22586,0174568	975665,2311297
1738	11637,78848,6912409	965065,7729910	1788	12122,98251,2485865	975878,6866722
1739	11647,43914,4642319	965284,8641356	1789	12132,74129,9352587	976092,1291015
1740	11657,09199,3283675	965503,8384718	1790	12142,50221,9643602	976305,2584918
1741	11666,74703,1667693	965722,6958692	1791	12152,26527,2228520	976518,3749173
1742	11676,40425,8626385	965941,43266171	1792	12162,03045,5977693	976731,3784517
1743	11686,06367,2992557	966160,0607249	1793	12171,79776,9762210	976944,2691690
1744	11695,72527,3599806	966378,5682717	1794	12181,56721,2453900	977157,0471430
1745	11705,38905,9282523	966596,9593365	1795	12191,33878,2925330	977369,7124470
1746	11715,05502,8875888	966815,2339984	1796	12201,11248,0049800	977582,2651550
1747	11724,72318,1215872	967033,3923359	1797	12210,88880,2701350	977794,7053400
1748	11734,39351,5139232	967251,4344281	1798	12220,66624,9754750	978007,0330757
1749	11744,06602,9453513	967469,3603533	1799	12230,44632,0085507	978219,2484350
1750	11753,74072,3087046	967687,1701902	1800	12240,22851,2569857	978431,33514912

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
1801	12250,01282,6084769	978643,3423173	1851	12741,90820,7741264	989101,3746512
1802	12259,79925,9507942	978855,2209862	1852	12751,79922,1487770	989307,7352332
1803	12269,58781,1717803	979066,9875707	1853	12761,69229,8850107	989513,9892461
1804	12279,37848,1593510	979278,6421435	1854	12771,58743,8742568	989720,1337577
1805	12289,17126,8014945	979490,1847772	1855	12781,48464,0080145	989926,1698359
1806	12298,96616,9862717	979701,6155444	1856	12791,38390,1778504	990132,0975483
1807	12308,76318,6018162	979912,9345175	1857	12801,28522,2753987	990337,9169626
1808	12318,56231,5363337	980124,1417687	1858	12811,18860,1923012	990543,6281462
1809	12328,36355,6781024	980335,2373704	1859	12821,09403,8205074	990749,2311666
1810	12338,16690,9154728	980546,2213945	1860	12831,00153,0516740	990954,7260910
1811	12347,97237,1368673	980757,0939131	1861	12840,91107,7777650	991160,1129868
1812	12357,77994,2307804	980967,8549981	1862	12850,82267,8907518	991365,3919210
1813	12367,58962,0857785	981178,5047213	1863	12860,73633,2826728	991570,5629608
1814	12377,40140,5904998	981389,0431545	1864	12870,65203,8456336	991775,6261730
1815	12387,21529,6336543	981599,4703692	1865	12880,56979,4718066	991980,5816246
1816	12397,03129,1040235	981809,7864369	1866	12890,48960,0534312	992185,4293823
1817	12406,84958,8904604	982019,9914291	1867	12900,41145,4828136	992390,1695128
1818	12416,66958,8818895	982230,0854171	1868	12910,33535,6523264	992594,8020828
1819	12426,49158,9673066	982440,0684720	1869	12920,26130,4544092	992799,3271587
1820	12436,31629,0357786	982649,9406651	1870	12930,18929,7815679	993003,7448069
1821	12446,14278,9764437	982859,7020673	1871	12940,11933,5263748	993208,0550938
1822	12455,97138,6785110	983069,3527495	1872	12950,05141,5814686	993412,2580856
1823	12465,80208,0312605	983278,8927826	1873	12959,98553,8395542	993616,3538485
1824	12475,63486,9240430	983488,3222372	1874	12969,92170,1934027	993820,3424485
1825	12485,46975,2462803	983697,6411841	1875	12979,85990,5358512	994024,2239517
1826	12495,30672,8874644	983906,8496937	1876	12989,80014,7598029	994227,9984238
1827	12505,14579,7371581	984115,9478365	1877	12999,74242,7582267	994431,6659308
1828	12514,98695,6849947	984324,9356828	1878	13009,68674,4241575	994635,2265382
1829	12524,83020,6206775	984533,8133029	1879	13019,63309,6506957	994838,6803117
1830	12534,67554,4339804	984742,5807668	1880	13029,58148,3310074	995042,0273169
1831	12544,52297,0147472	984951,2381447	1881	13039,53190,3583243	995245,2676192
1832	12554,37248,2528919	985159,7855064	1882	13049,48435,6259436	995448,4012840
1833	12564,22408,0383983	985368,2229219	1883	13059,43884,0272276	995651,14283764
1834	12574,07776,2613202	985576,5504609	1884	13069,39535,4556040	995854,3489619
1835	12583,93352,8117811	985784,7681930	1885	13079,35389,8045659	996057,1631052
1836	12593,79137,5799742	985992,8761879	1886	13089,31446,9676711	996259,8708716
1837	12603,65130,4561621	986200,8745149	1887	13099,27706,8385428	996462,4723259
1838	12613,51331,3306770	986408,7632435	1888	13109,24169,3108687	996664,9675330
1839	12623,37740,0939205	986616,5424430	1889	13119,20834,2784017	996867,3565576
1840	12633,24356,6363635	986824,2121824	1890	13129,17701,6349593	997069,6394643
1841	12643,11180,8485459	987031,7725310	1891	13139,14771,2744237	997271,8163178
1842	12652,98212,6210769	987239,2235578	1892	13149,12043,0907415	997473,8871825
1843	12662,85451,8446347	987446,5653315	1893	13159,09516,9779240	997675,8521229
1844	12672,72898,4099662	987653,7979210	1894	13169,07192,8300469	997877,7112031
1845	12682,60552,2078872	987860,9213951	1895	13179,05070,5412500	998079,4644876
1846	12692,48413,1292823	988067,9358224	1896	13189,03150,0057376	998281,1120404
1847	12702,36481,0651047	988274,8412713	1897	13199,01431,1177780	998482,6539255
1848	12712,24755,9063760	988481,6378104	1898	13208,99913,7717035	998684,0902070
1849	12722,13237,5441864	988688,3255079	1899	13218,98597,8619105	998885,4209488
1850	12732,01925,8696943	988894,9044321	1900	13228,97483,2828593	999086,6462145

<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>	<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>
1901	13238,96569,9290738		1951	13741,05151,8539193	
1902	13248,95857,6951419	999287,7660681	1952	13751,14362,5958816	1009210,7419623
1903	13258,95346,4757149	999488,7805730	1953	13761,23769,1642247	1009406,5683431
1904	13268,95036,1655078	999689,6897929	1954	13771,33371,4567365	1009602,2925118
1905	13278,94926,6592989	999890,4937912	1955	13781,43169,3712645	1009797,9145279
		1000091,1926312			1009993,4344507
1906	13288,95017,8519302		1956	13791,53162,8057152	
1907	13298,95309,6383065	1000291,7863764	1957	13801,63351,6580548	1010188,8523396
1908	13308,95801,9133964	1000492,2750899	1958	13811,73735,8263085	1010384,1682537
1909	13318,96494,5722311	1000692,6588347	1959	13821,84315,2085606	1010579,3822521
1910	13328,97387,5099052	1000892,9376741	1960	13831,95089,7029544	1010774,4943938
		1001093,1116709			1010969,5047381
1911	13338,98480,6215762		1961	13842,06059,2076925	
1912	13348,99773,8024642	1001293,1808880	1962	13852,17223,6210360	1011164,4133435
1913	13359,01266,9478524	1001493,1453882	1963	13862,28582,8413250	1011359,2202690
1914	13369,02959,9530867	1001693,0052343	1964	13872,40136,7668783	1011553,9255734
1915	13379,04852,7135756	1001892,7604888	1965	13882,51885,2961936	1011748,5293152
		1002092,4112143			1011943,0315532
1916	13389,06945,1247899		1966	13892,63828,3277467	
1917	13399,09237,0822632	1002291,9574733	1967	13902,75965,7600925	1012137,4323457
1918	13409,11728,4815913	1002491,3993281	1968	13912,88297,4918438	1012331,7317513
1919	13419,14419,2184324	1002690,7368411	1969	13923,00823,4216722	1012525,9298284
1920	13429,17309,1885069	1002889,9700745	1970	13933,13543,4483073	1012720,0266351
		1003089,0990903			1012914,0222298
1921	13439,20396,2875972		1971	13943,26457,4705371	
1922	13449,23686,4115479	1003288,1239507	1972	13953,39565,3872076	1013107,9166705
1923	13459,27173,4562655	1003487,0447176	1973	13963,52867,0972230	1013301,7100154
1924	13469,30859,3177185	1003685,8614530	1974	13973,66362,4995455	1013495,4023225
1925	13479,34743,8919371	1003884,5742186	1975	13983,80051,4931950	1013688,9936495
		1004083,1830761			1013882,4840545
1926	13489,38827,0750132		1976	13993,93933,9772495	
1927	13499,43108,7631005	1004281,6880873	1977	14004,08009,8508446	1014075,8735951
1928	13509,47588,8524140	1004480,0893136	1978	14014,22279,0131737	1014269,1623291
1929	13519,52267,2392306	1004678,3868166	1979	14024,36741,3634878	1014462,3503140
1930	13529,57143,8198882	1004876,5806576	1980	14034,51326,8010954	1014655,4376076
		1005074,6708980			1014848,4242670
1931	13539,62218,4907862		1981	14044,66245,2253624	
1932	13549,67491,1483852	1005272,6575990	1982	14054,81286,5357124	1015041,3103499
1933	13559,72961,6892071	1005470,5408219	1983	14064,96520,6316259	1015234,0959135
1934	13569,78630,0098348	1005668,3206276	1984	14075,11947,4126411	1015426,7810151
1935	13579,84496,0769120	1005865,9970772	1985	14085,27566,7783530	1015619,3657119
		1006063,5702317			1015811,8500609
1936	13589,90559,5771437		1986	14095,43378,6284139	
1937	13599,96820,6172954	1006261,0401517	1987	14105,59382,8625331	1016004,2341192
1938	13610,03279,0241936	1006458,4068982	1988	14115,75579,3804769	1016196,5179438
1939	13620,09934,6947253	1006655,6705317	1989	14125,91968,0820684	1016388,7015915
1940	13630,16787,5258384	1006852,8311131	1990	14136,08548,5671875	1016580,7851192
		1007042,8887025			1016772,7685835
1941	13640,23837,4145409		1991	14146,25321,6357711	
1942	13650,31084,2579016	1007246,8433607	1992	14156,42286,2878124	1016964,6520413
1943	13660,38527,9530496	1007443,6951480	1993	14166,59442,7233614	1017155,4355490
1944	13670,46168,3971741	1007640,4441245	1994	14176,76790,8425246	1017348,1191632
1945	13680,54075,4875248	1007837,0903507	1995	14186,94330,5454650	1017539,7029404
		1008033,6338865			1017731,1869369
1946	13690,62039,1214113		1996	14197,12061,7324018	
1947	13700,70269,1962033	1008230,0747920	1997	14207,29984,3036109	1017922,5712790
1948	13710,78695,6093306	1008426,4131273	1998	14217,48098,1594239	1018113,8558130
1949	13720,87318,2582828	1008622,6489522	1999	14227,66403,2002297	1018305,0408051
1950	13730,96137,0406093	1008818,7823265	2000	14237,84899,3264703	1018496,1262413
		1009014,8133100			1018687,1121777

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
2001	14248,03586,4386480	101887,79986702	2051	14759,79266,3533571	102829,67484437
2002	14258,22464,4373181	101906,87857747	2052	14770,77563,1018008	102848,26358622
2003	14268,41533,2230928	101925,94735470	2053	14780,36045,7376630	102866,84266512
2004	14278,60792,6966398	101945,00620428	2054	14790,64714,1643142	102885,41208632
2005	14288,80242,7586826	101964,05513179	2055	14800,93568,2851774	102903,97185502
2006	14298,99883,3100005	101983,09414278	2056	14811,22608,0037276	102922,52197647
2007	14309,19714,2514283	102002,12324281	2057	14821,51833,2234923	102941,06245587
2008	14319,39735,4838564	102021,14243741	2058	14831,81243,8480510	102959,59329843
2009	14329,59946,9082305	102040,15173214	2059	14842,10839,7810353	102978,11450935
2010	14339,80348,4255519	102059,15113251	2060	14852,40620,9261288	102996,62609384
2011	14350,00939,9368770	102078,14064406	2061	14862,70587,1870672	103015,12805707
2012	14360,21721,3433176	102097,12027231	2062	14873,00738,4676380	103033,62040424
2013	14370,42692,5460408	102116,09002276	2063	14883,31074,6716804	103052,10314052
2014	14380,63853,4462684	102135,04990092	2064	14893,61595,7030856	103070,57627108
2015	14390,85203,9452776	102153,99991229	2065	14903,92301,4657964	103089,03980108
2016	14401,06743,9444005	102172,94006235	2066	14914,23191,8638072	103107,49373568
2017	14411,28473,3450240	102191,87035659	2067	14924,54266,8011640	103125,93808004
2018	14421,50392,0485899	102210,79080048	2068	14934,85526,1819644	103144,37283930
2019	14431,72499,9565947	102229,70139950	2069	14945,16969,9103574	103162,79801859
2020	14441,94796,9705897	102248,60215910	2070	14955,48597,8905433	103181,21362304
2021	14452,17282,9921807	102267,49308475	2071	14965,80410,0267737	103199,61965780
2022	14462,39957,9230282	102286,37418189	2072	14976,12406,2233517	103218,01612796
2023	14472,62821,6648471	102305,24545595	2073	14986,44586,3846313	103236,40303865
2024	14482,85874,1194066	102324,10691239	2074	14996,76953,4150178	103254,78039498
2025	14493,09115,1885305	102342,95855662	2075	15007,09498,2189676	103273,14820204
2026	14503,32544,7740967	102361,80039407	2076	15017,42229,7009880	103291,50646492
2027	14513,56162,7780374	102380,63243015	2077	15027,75144,7656372	103309,85518873
2028	14523,79969,1023389	102399,45467026	2078	15038,08243,3175245	103328,19437853
2029	14534,03963,6490415	102418,26711981	2079	15048,41525,2613098	103346,52403941
2030	14544,28146,3202396	102437,06978421	2080	15058,74990,5017039	103364,84417641
2031	14554,52517,0180817	102455,86266881	2081	15069,08638,9434581	103383,15479465
2032	14564,77075,6447698	102474,64577902	2082	15079,42470,4914146	103401,45589913
2033	14575,01822,1025601	102493,41912021	2083	15089,76485,0504059	103419,74749493
2034	14585,26756,2937622	102512,18269773	2084	15100,10682,5253552	103438,02958709
2035	14595,51878,1207395	102530,93651697	2085	15110,45062,8212262	103456,30218064
2036	14605,77187,4859092	102549,68058325	2086	15120,79625,8430326	103474,56528063
2037	14616,02684,2917417	102568,41490194	2087	15131,14371,4958389	103492,81889206
2038	14626,28368,4407612	102587,13947837	2088	15141,49299,6847595	103511,06301997
2039	14636,54239,8355449	102605,85431788	2089	15151,84410,3149592	103529,29766937
2040	14646,80298,3787237	102624,55942580	2090	15162,19703,2916530	103547,52284526
2041	14657,06543,9729817	102643,25480743	2091	15172,55178,5201056	103565,73855265
2042	14667,32976,5210560	102661,94046811	2092	15182,90835,9056321	103583,94479653
2043	14677,59595,9257371	102680,61641313	2093	15193,26675,3535974	103602,14158189
2044	14687,86402,0898684	102699,28264780	2094	15203,62696,7694163	103620,32891372
2045	14698,13394,9163464	102717,93917740	2095	15213,98900,0585535	103638,50679698
2046	14708,40574,3081204	102736,58600723	2096	15224,35285,1265233	103656,67523666
2047	14718,67940,1681927	102755,22314257	2097	15234,71815,18788899	103674,83423771
2048	14728,95492,3996184	102773,85058869	2098	15245,08600,2212670	103692,98380510
2049	14739,23230,9055053	102792,46835085	2099	15255,45530,0523180	103711,12394377
2050	14749,51155,5890138	102811,07643433	2100	15265,82641,2987557	103729,25465868

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
2101	15276,19933,8453425	103747,37595477	2151	15797,13659,4345734	104641,53921102
2102	15286,57407,6048902	103765,48783696	2152	15807,60074,8266836	104659,18656016
2103	15296,95062,4832599	103783,59031020	2153	15818,06666,6922852	104676,82473933
2104	15307,32898,3863618	103801,68337939	2154	15828,53434,9396785	104694,45375314
2105	15317,70915,2201557	103819,76704946	2155	15839,00379,4772099	104712,07360624
2106	15328,09112,8906504	103837,84132532	2156	15849,47500,2132723	104729,68430325
2107	15338,47491,3039036	103855,90621188	2157	15859,94797,0563748	104747,28584878
2108	15348,86050,3660224	103873,96171402	2158	15870,42269,9147927	104764,87824745
2109	15359,24789,9831626	103892,00783665	2159	15880,89918,6972672	104782,46150387
2110	15369,63710,0615291	103910,04458465	2160	15891,37743,3123059	104800,03562262
2111	15380,02810,5073756	103928,07196290	2161	15901,85743,6685321	104817,60060833
2112	15390,42091,2270046	103946,08997628	2162	15912,33917,6746154	104835,15646556
2113	15400,81552,1267674	103964,09862966	2163	15922,82271,2392711	104853,70319892
2114	15411,21193,1130640	103982,09792789	2164	15933,30798,2712602	104870,24081297
2115	15421,61014,0923429	104000,78787585	2165	15943,79500,6793899	104887,76931230
2116	15432,01014,9711014	104018,06847836	2166	15954,28378,3725129	104905,28870145
2117	15442,41195,6558850	104036,03974030	2167	15964,77431,2595274	104922,79898503
2118	15452,81556,0532880	104054,00166649	2168	15975,26659,2493777	104940,30016756
2119	15463,22096,0699529	104071,95426176	2169	15985,76062,2510533	104957,79225361
2120	15473,62815,6125705	104089,89753095	2170	15996,25640,1735894	104975,27524772
2121	15484,03714,5878800	104107,83147888	2171	16006,75392,9260666	104992,74915443
2122	15494,44792,9026688	104125,75611035	2172	16017,25320,4176109	105010,21397829
2123	15504,86050,4637723	104143,67143020	2173	16027,75422,5573938	105027,66972382
2124	15515,27487,1787743	104161,57744322	2174	16038,25699,2546320	105045,11639555
2125	15525,69102,9525065	104179,47415419	2175	16048,76150,4185875	105062,55399799
2126	15536,10897,6940484	104197,36156793	2176	16059,26775,9585674	105079,98253567
2127	15546,52871,3097278	104215,23968922	2177	16069,77575,7839240	105097,40201309
2128	15556,95023,7066200	104233,10852284	2178	16080,28549,8040549	105114,81243476
2129	15567,37354,7918484	104250,96807357	2179	16090,79697,9284025	105132,21380517
2130	15577,79864,4725841	104268,81834616	2180	16101,31020,0664542	105149,66512882
2131	15588,22552,6560457	104286,65934540	2181	16111,82516,1277424	105168,98941021
2132	15598,65419,2494998	104304,49107604	2182	16122,34186,0218445	105184,36365380
2133	15609,08454,1602602	104322,31354283	2183	16132,86029,6583825	105201,72886409
2134	15619,51687,2956885	104340,12675051	2184	16143,38046,9470234	105219,08504553
2135	15629,95088,5631936	104357,93070383	2185	16153,90237,7974787	105236,43220261
2136	15640,38667,8702320	104375,72540754	2186	16164,42602,1195048	105253,77033978
2137	15650,82425,1243074	104393,51086634	2187	16174,95139,8229026	105271,09946149
2138	15661,26360,2329708	104411,28708498	2188	16185,47850,8175175	105288,41957220
2139	15671,70473,1038206	104429,05406816	2189	16196,00735,0132395	105305,73067636
2140	15682,14763,6445023	104446,81182061	2190	16206,53792,3200031	105323,03277841
2141	15692,59231,7627084	104464,56034702	2191	16217,07022,6477872	105340,32588278
2142	15703,03877,3661786	104482,29965210	2192	16227,60425,9066150	105357,60999390
2143	15713,48700,3626996	104500,02974056	2193	16238,14002,0065540	105374,88511620
2144	15723,93700,6601052	104517,75061706	2194	16248,67750,8577160	105392,15125410
2145	15734,38878,1662758	104535,46228631	2195	16259,21672,3702570	105409,40841201
2146	15744,84232,7891389	104553,16475298	2196	16269,75766,4543772	105426,65659435
2147	15755,29764,4366686	104570,85802174	2197	16280,30033,0203206	105443,89580551
2148	15765,75473,0168860	104588,54209727	2198	16290,84471,9783757	105461,12604990
2149	15776,21358,4378587	104606,21698422	2199	16301,39083,2388748	105478,34733191
2150	15786,67420,6077009	104623,88268725	2200	16311,93866,7121939	105495,55965594

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
2201	16322,48822,3087533	105512,76302635	2251	16852,14092,2440181	106361,61110344
2202	16333,03949,9390168	105529,95744755	2252	16862,77708,3550524	106378,36353500
2203	16343,59249,5134923	105547,14292388	2253	16873,41491,9904025	106395,10723403
2204	16354,14720,9427311	105564,31945973	2254	16884,05443,0627428	106411,84220463
2205	16364,70364,1373284	105581,48705947	2255	16894,69561,4847891	106428,56845094
2206	16375,26179,0079231	105598,64572744	2256	16905,33847,1692986	106445,28597706
2207	16385,82165,4651975	105615,79545800	2257	16915,98330,0290692	106461,99478710
2208	16396,38323,4198775	105632,93628550	2258	16926,62919,9769402	106478,69488517
2209	16406,94652,7827325	105650,06818428	2259	16937,27706,9257919	106495,38627535
2210	16417,51153,4645753	105667,19116868	2260	16947,92660,7885454	106512,76896175
2211	16428,07825,3762622	105684,30524304	2261	16958,57781,4781629	106528,74294846
2212	16438,64668,4286925	105701,41041167	2262	16969,23068,9076475	106545,40823956
2213	16449,21682,5328093	105718,50667891	2263	16979,88522,9900431	106562,06483912
2214	16459,78867,5995984	105735,59404907	2264	16990,54143,6384343	106578,71275123
2215	16470,36223,5400891	105752,67252646	2265	17001,19930,7659466	106595,35197996
2216	16480,93750,2653537	105769,74211540	2266	17011,85884,2857462	106611,98252936
2217	16491,51447,6865077	105786,80282018	2267	17022,52004,1110397	106628,60440350
2218	16502,09315,7147095	105803,85464510	2268	17033,18290,1550748	106645,21761045
2219	16512,67354,2611605	105820,89759446	2269	17043,84742,3311392	106661,82214224
2220	16523,25563,2371051	105837,93167254	2270	17054,51360,5525616	106678,41801493
2221	16533,83942,5538305	105854,95688362	2271	17065,18144,7327109	106695,00522856
2222	16544,42492,1226657	105871,97323199	2272	17075,85094,7849965	106711,58378716
2223	16555,01211,8549866	105888,98072192	2273	17086,52210,6228681	106728,15369478
2224	16565,60101,6622058	105905,97935766	2274	17097,19492,1598159	106744,71495543
2225	16576,19161,4557824	105922,96914349	2275	17107,86939,3093702	106761,26757315
2226	16586,78391,1472173	105939,95008366	2276	17118,54551,9851017	106777,81155195
2227	16597,37790,6480539	105956,92218244	2277	17129,22330,1006212	106794,34689585
2228	16607,97359,8698783	105973,88544406	2278	17139,90273,5695797	106810,87360886
2229	16618,57098,7243189	105990,83987276	2279	17150,58382,3056683	106827,39169497
2230	16629,17007,1237465	106007,78547279	2280	17161,26556,2226180	106843,90115821
2231	16639,77084,9777744	106024,72224838	2281	17171,95095,2342001	106860,40200255
2232	16650,37332,2002582	106041,65020376	2282	17182,63699,2542256	106876,89423200
2233	16660,97748,7022958	106058,56934314	2283	17193,32468,1965456	106893,337785054
2234	16671,58334,3957272	106075,47967076	2284	17204,01401,9750517	106909,85286215
2235	16682,19089,1924349	106092,38119082	2285	17214,70500,5036725	106926,31927081
2236	16692,80013,0043431	106109,27390753	2286	17225,39763,6963806	106942,77708051
2237	16703,41105,7434184	106126,15782510	2287	17236,09191,4671857	106959,22629519
2238	16714,02367,3216694	106143,03294771	2288	17245,78783,7301376	106975,66691883
2239	16724,63797,5511465	106159,89927959	2289	17257,48540,3993259	106992,09895540
2240	16735,25396,6439424	106176,75682489	2290	17268,18461,3888799	107008,52240585
2241	16745,87164,2121913	106193,60558782	2291	17278,88546,6129684	107024,93728311
2242	16756,49100,2680695	106210,44557255	2292	17289,58795,9857995	107041,34358216
2243	16767,11204,7237950	106227,27678326	2293	17300,29209,4216212	107057,74130992
2244	16777,73477,4916276	106244,09922411	2294	17310,99786,8347204	107074,13047034
2245	16788,35918,4838687	106260,91289927	2295	17321,70528,1394238	107090,51106734
2246	16798,98527,6128614	106277,71781290	2296	17332,41433,2500972	107106,88310487
2247	16809,61304,7909904	106294,51396917	2297	17343,12502,0811459	107123,24658683
2248	16820,24243,9306821	106311,30137221	2298	17353,83734,5470142	107139,60151716
2249	16830,87362,9444042	106328,08002618	2299	17364,55130,5621858	107155,94789976
2250	16841,50643,7446660	106344,84993521	2300	17375,26690,0411834	107172,28573855

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
2301	17385,98412,8985690	107188,61503744	2351	17923,90986,3447837	107994,27666705
2302	17396,70299,0489434	107204,93580033	2352	17934,70929,1114542	108010,87550947
2303	17407,42348,4062467	107221,24803111	2353	17945,51030,8665489	108026,06600920
2304	17418,14560,8872578	107237,55173368	2354	17956,31291,5266409	108041,94816992
2305	17428,86936,4045946	107253,84691194	2355	17967,11711,0083401	108057,82199530
2306	17439,59474,8737140	107270,13356974	2356	17977,92289,2282931	108073,68748900
2307	17450,32176,2094114	107286,41171101	2357	17988,73026,1031831	108089,54465472
2308	17461,05040,3265215	107302,68133958	2358	17999,53921,5497303	108105,39349610
2309	17471,78067,1399173	107318,94245935	2359	18010,34975,4846913	108121,23401680
2310	17482,51256,5645108	107335,19507418	2360	18021,16187,8248593	108137,06622050
2311	17493,24608,5152526	107351,43918792	2361	18031,97558,4870643	108152,89011083
2312	17503,98122,9071318	107367,67480445	2362	18042,79087,3881726	108168,70569144
2313	17514,71799,6551763	107383,90192761	2363	18053,60774,4450870	108184,51296599
2314	17525,45638,6744524	107400,12056126	2364	18064,42619,5747469	108200,31193810
2315	17536,19539,8800650	107416,33070923	2365	18075,24622,6941280	108216,10261143
2316	17546,93803,1871573	107432,53237537	2366	18086,06783,7202423	108231,88498959
2317	17557,68123,5109110	107448,72556353	2367	18096,82102,5701381	108247,65907022
2318	17568,42615,7665463	107464,91027752	2368	18107,71579,1609003	108263,42487494
2319	17579,17264,8693215	107481,08652117	2369	18118,54213,4096497	108279,18238937
2320	17589,92075,7345332	107497,25429833	2370	18129,37005,2335433	108294,93162313
2321	17600,67048,2775165	107513,41361278	2371	18140,19954,5497746	108310,67257983
2322	17611,42182,4136443	107529,56446838	2372	18151,03061,2755729	108326,40526307
2323	17622,17478,0583281	107545,70686890	2373	18161,86325,3282036	108342,12967645
2324	17632,92935,1270171	107561,84081817	2374	18172,69746,6249684	108357,84582363
2325	17643,68553,5351988	107577,96631998	2375	18183,53325,0832047	108373,55370813
2326	17654,44333,1983986	107594,08337814	2376	18194,37060,6202860	108389,25333358
2327	17665,20274,0321800	107610,19199644	2377	18205,20953,1536218	108404,94470355
2328	17675,96375,9521445	107626,29217867	2378	18216,05002,6006573	108420,62782164
2329	17686,72638,8739312	107642,38392861	2379	18226,89208,8788739	108436,30269142
2330	17697,49062,7132178	107658,45725005	2380	18237,73571,9057880	108451,96931648
2331	17708,25647,3857178	107674,54214675	2381	18248,58091,5989528	108467,62770037
2332	17719,02392,8071853	107690,60862250	2382	18259,42767,8759565	108483,27784669
2333	17729,79298,8934103	107706,66668107	2383	18270,27600,6544234	108499,91975897
2334	17740,56365,5602210	107722,71632621	2384	18281,12589,8520131	108514,55344079
2335	17751,33592,7234830	107738,75756168	2385	18291,97735,3864210	108530,17889571
2336	17762,10980,2990999	107754,79039125	2386	18302,83037,1753781	108545,79612728
2337	17772,88528,2030124	107770,81481867	2387	18313,68495,1366509	108561,40513904
2338	17783,66236,3511991	107786,83084767	2388	18324,54109,1880413	108577,00593454
2339	17794,44104,6596758	107802,83848201	2389	18335,39879,2473867	108592,59851732
2340	17805,22133,0444960	107818,83772543	2390	18346,25805,2325599	108608,18289093
2341	17816,00321,4217502	107834,82858165	2391	18357,11887,0614692	108623,75905889
2342	17826,78669,7075667	107850,81105441	2392	18367,98124,6520581	108639,32702472
2343	17837,57177,8181109	107866,78514744	2393	18378,84517,9223053	108654,88679197
2344	17848,35845,6695853	107882,75086446	2394	18389,71066,7902250	108670,43836414
2345	17859,14673,1782299	107898,70820918	2395	18400,57771,1738664	108685,98174477
2346	17869,93660,2603217	107914,65718532	2396	18411,44630,9913141	108701,51693735
2347	17880,72806,8321749	107930,59779059	2397	18422,31646,1606876	108717,04394541
2348	17891,52112,8101408	107946,53004671	2398	18433,18816,6001417	108732,56277244
2349	17902,31578,1106079	107962,45393935	2399	18444,06142,2278661	108748,07342195
2350	17913,11202,6500014	107978,36947823	2400	18454,93622,9620856	108763,57589744

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
2401	18465,81258,7210600	1087790,7020240	2451	19011,58906,8982283	1095434,4415544
2402	18476,69049,4230841	1087945,5634034	2452	19022,54341,3397827	1095585,2630931
2403	18487,56994,9864875	1088100,3431472	2453	19033,49926,6028759	1095736,0046922
2404	18498,45095,3296347	1088255,0412903	2454	19044,45662,6075681	1095886,6663847
2405	18509,33350,3709251	1088409,6578676	2455	19055,41549,2739528	1096037,2482036
2406	18520,21760,0287927	1088564,1929135	2456	19066,37586,5221565	1096187,7501817
2407	18531,10324,2217065	1088718,6464636	2457	19077,33774,2723382	1096338,1723519
2408	18541,99042,8681701	1088873,0185517	2458	19088,30112,4440901	1096488,5147472
2409	18552,87915,8867218	1089027,3092127	2459	19099,26600,9594373	1096638,7774002
2410	18563,76943,1959345	1089181,5184813	2460	19110,23239,7368370	1096788,9603438
2411	18574,66124,7144158	1089335,6463920	2461	19121,20028,6971814	1096939,0636108
2412	18585,55460,3608078	1089489,6929793	2462	19132,16967,7007922	1097089,0872337
2413	18596,44950,0537871	1089643,6582777	2463	19143,14056,8480259	1097239,0312453
2414	18607,34593,7120648	1089797,5423217	2464	19154,11295,8792712	1097388,8956783
2415	18618,24391,2543865	1089951,3451457	2465	19165,08684,7749495	1097538,6805651
2416	18629,14342,5995322	1090105,0667841	2466	19176,05223,4555146	1097688,3859385
2417	18640,04447,6663163	1090258,7072712	2467	19187,03911,8414531	1097838,2118308
2418	18650,94706,3735875	1090412,2666413	2468	19198,01749,8553239	1097987,5582747
2419	18661,85118,6402288	1090565,7449287	2469	19208,99737,4115586	1098137,2253025
2420	18672,75684,3851575	1090719,1421676	2470	19219,97874,4368611	1098286,4129466
2421	18683,66403,5273251	1090872,4583922	2471	19230,96160,8498077	1098435,7212396
2422	18694,57275,9857173	1091025,6936366	2472	19241,94596,5710473	1098584,9502137
2423	18705,48301,6793539	1091178,8479351	2473	19252,93181,5212011	1098734,0999012
2424	18716,39480,5272890	1091331,9213215	2474	19263,91915,6211623	1098883,1703345
2425	18727,30812,4486005	1091484,9138301	2475	19274,90798,7914968	1099032,1615457
2426	18738,22297,3624406	1091637,8254948	2476	19285,89830,9530425	1099181,0735672
2427	18749,13935,1879354	1091790,6563495	2477	19296,89012,0266097	1099329,9064310
2428	18760,05725,8442849	1091943,4064282	2478	19307,88341,9330407	1099478,6601693
2429	18770,97669,2507131	1092096,0757648	2479	19318,87820,5932100	1099627,3348143
2430	18781,89765,3264779	1092248,6643932	2480	19329,87447,9280243	1099775,9303979
2431	18792,82013,9908711	1092401,1723471	2481	19340,87223,8584222	1099924,4469524
2432	18803,74415,1632182	1092553,5996604	2482	19351,87148,3053746	1100072,8845095
2433	18814,66968,7628786	1092705,9463667	2483	19362,87221,1898841	1100221,2431014
2434	18825,59674,7092453	1092858,2124999	2484	19373,87442,4329856	1100369,5227600
2435	18836,52532,9217453	1093010,3980936	2485	19384,87811,9557456	1100517,7235172
2436	18847,45543,3198389	1093162,5031814	2486	19395,88329,6792628	1100665,8454048
2437	18858,38705,8230203	1093314,5277969	2487	19406,88995,5246676	1100813,8884547
2438	18869,32020,3508171	1093466,4719737	2488	19417,89809,4131223	1100961,8526987
2439	18880,25486,8227908	1093618,3357453	2489	19428,90771,2658210	1101109,7381686
2440	18891,19105,1585361	1093770,1191452	2490	19439,91881,0039896	1101257,5448960
2441	18902,12875,2776813	1093921,8222068	2491	19450,93138,5488856	1101405,2729127
2442	18913,06797,0998881	1094073,4449637	2492	19461,94542,8217983	1101552,9222504
2443	18924,00870,5448518	1094224,9874491	2493	19472,96096,7440487	1101700,4929408
2444	18934,95095,5323009	1094376,4496964	2494	19483,97797,2369895	1101847,9850153
2445	18945,89471,19819973	1094527,8317389	2495	19494,99645,2220048	1101995,3985055
2446	18956,83999,8137362	1094679,1336099	2496	19505,01640,6205103	1102142,7334431
2447	18967,78678,9473461	1094830,3553427	2497	19517,03783,3539534	1102289,9898594
2448	18978,73509,3026888	1094981,4969703	2498	19528,06073,3438128	1102437,1677860
2449	18989,68490,7996591	1095132,5585261	2499	19539,08510,5115988	1102584,2672544
2450	19000,63623,3581852	1095283,5400431	2500	19550,11094,7788532	1102731,2882957

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
2501	19561,138260571489	1102878,2309416	2551	20114,36118,1643483	1110126,0924029
2502	19572,16704,2980905	1103025,0952232	2552	20125,46244,2567512	1110269,0776949
2503	19583,19729,3933138	1103171,8811719	2553	20136,56513,3344461	1110411,9861772
2504	19594,22901,2744857	1103318,5888190	2554	20147,66925,3206232	1110554,8178794
2505	19605,26219,8633047	1103465,2181956	2555	20158,77480,1385026	1110697,5728312
2506	19616,29685,0815003	1103611,7693330	2556	20169,88177,7113338	1110840,2510623
2507	19627,33296,8508333	1103758,2422624	2557	20180,99017,9623962	1110982,8526022
2508	19638,37055,0930957	1103904,6370148	2558	20192,10000,8149984	1111125,3774804
2509	19649,40959,7301105	1104051,9536214	2559	20203,21126,1924788	1111267,8257264
2510	19660,45010,6837320	1104197,1921132	2560	20214,32394,0182052	1111410,1973696
2511	19671,49207,8758452	1104343,3525213	2561	20225,43804,2155748	1111552,4924396
2512	19682,53551,2283665	1104489,4348767	2562	20236,55356,7080144	1111694,7109657
2513	19693,58040,6632432	1104635,4392102	2563	20247,67051,4189801	1111836,8529772
2514	19704,62676,1024534	1104781,3655531	2564	20258,78886,2719573	1111978,9185935
2515	19715,67457,4680065	1104927,2139358	2565	20269,90867,1904608	1112120,9075741
2516	19726,72384,6819423	1105073,9843896	2566	20281,02988,0980349	1112262,8202179
2517	19737,77457,8663319	1105218,6769451	2567	20292,15250,9182528	1112404,6564645
2518	19748,82676,3432770	1105364,2916332	2568	20303,27655,5747173	1112546,4163430
2519	19759,88040,6349102	1105509,8284846	2569	20314,40201,9910603	1112688,0998825
2520	19770,93550,4633949	1105655,2875301	2570	20325,52890,0909428	1112829,7071122
2521	19781,99205,7509250	1105800,6688004	2571	20336,65719,7980550	1112971,2380613
2522	19793,05006,4197255	1105945,9723262	2572	20347,78691,0361163	1113112,6927589
2523	19804,10952,3920517	1106091,1981380	2573	20358,91803,7283752	1113254,0712340
2524	19815,17043,5901897	1106236,3462666	2574	20370,05057,8001092	1113395,3735156
2525	19826,23279,9364563	1106381,4167424	2575	20381,18453,1756248	1113536,5996328
2526	19837,29661,3531986	1106526,4095960	2576	20392,31989,7732576	1113677,7496145
2527	19848,36187,7627946	1106671,3248579	2577	20403,45667,5228721	1113818,8234897
2528	19859,42859,0876525	1106816,1625587	2578	20414,59486,3463618	1113959,8212873
2529	19870,49675,2502112	1106960,9227287	2579	20425,73446,1676492	1114100,7430362
2530	19881,56636,1729399	1107105,6053983	2580	20436,87546,9106854	1114241,5887652
2531	19892,63741,7783382	1107250,2105980	2581	20448,01788,4994508	1114382,3585032
2532	19903,70991,9889362	1107394,7383581	2582	20459,16170,8579539	1114523,0522789
2533	19914,78386,7272943	1107539,1887089	2583	20470,30693,9102328	1114663,5701212
2534	19925,85925,9160031	1107683,5616806	2584	20481,45357,5803540	1114804,2120588
2535	19936,93609,4776838	1107827,8573036	2585	20492,60161,7924128	1114944,6781201
2536	19948,01487,3349874	1107972,0756081	2586	20503,75106,4705329	1115085,0683343
2537	19959,09409,4105955	1108116,2166242	2587	20514,90191,5388672	1115225,3827296
2538	19970,17525,6272197	1108260,2803822	2588	20526,05416,9215968	1115365,6213349
2539	19981,25785,9076019	1108404,2669120	2589	20537,20782,5429317	1115505,7841786
2540	19992,34190,1745139	1108548,1762439	2590	20548,36288,3271104	1115645,8712894
2541	20003,42738,3507578	1108692,2084079	2591	20559,51934,1983997	1115785,8826957
2542	20014,51430,3591657	1108835,7634839	2592	20570,67720,0810954	1115925,8184260
2543	20025,60266,1225996	1108979,4413521	2593	20581,83645,8995214	1116065,6785089
2544	20036,69245,5639517	1109123,0421924	2594	20592,99711,5780303	1116205,4629727
2545	20047,78368,6061441	1109266,5659847	2595	20604,15947,0410030	1116345,1718459
2546	20058,87635,1721288	1109410,0127589	2596	20615,32262,2128489	1116484,8051568
2547	20069,97045,1848877	1109553,5825448	2597	20626,48747,0180057	1116624,3629338
2548	20081,106593,5674325	1109696,6758725	2598	20637,65371,3809395	1116763,8452051
2549	20092,16295,2428050	1109839,8912715	2599	20648,82135,2261446	1116903,2519992
2550	20103,26135,1340765	1109983,0302718	2600	20659,99038,4781438	1117042,5833442

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
2601	20671,16081,0614880	1117181,8392684	2651	21231,44198,4522777	1124049,0893002
2602	20682,33262,9007564	1117321,0197999	2652	21242,68247,5415779	1124184,535174
2603	20693,50583,9205563	1117460,1249670	2653	21253,92432,0770953	1124319,9077421
2604	20704,68044,0455833	1117599,1547978	2654	21265,16751,9848374	1124455,2060010
2605	20715,85643,2003211	1117738,1093203	2655	21276,41207,1908384	1124590,4303208
2606	20727,03381,3796414	1117876,9885628	2656	21287,55737,6211592	1124725,5807283
2607	20738,21258,2982042	1118015,5792532	2657	21298,90523,2018875	1124860,6572500
2608	20749,39274,0907574	1118154,5213195	2658	21310,15383,8591375	1124995,6599125
2609	20760,57428,6127769	1118293,1748898	2659	21321,40379,5190500	1125130,5887425
2610	20771,75721,7869668	1118431,7532920	2660	21332,65510,1077925	1125265,4437664
2611	20782,94153,5402588	1118570,2565541	2661	21343,90775,5515589	1125400,2250110
2612	20794,12723,7968129	1118708,6847039	2662	21355,16175,7765699	1125534,9325725
2613	20805,31432,4815168	1118847,0377694	2663	21366,41710,7090724	1125669,5662675
2614	20816,50279,5192862	1118985,3157784	2664	21377,67380,2753399	1125804,1263325
2615	20827,69264,8350646	1119123,5187587	2665	21388,93184,4016724	1125938,6127239
2616	20838,88388,3538233	1119261,6467381	2666	21400,19123,0143963	1126073,0254681
2617	20850,07650,0005614	1119399,6997443	2667	21411,45196,0398644	1126207,3645914
2618	20861,27049,7003057	1119537,6778052	2668	21422,71403,4044559	1126341,6301202
2619	20872,46587,3781109	1119675,5809484	2669	21433,97745,0345761	1126475,8220809
2620	20883,66262,9590594	1119813,4092016	2670	21445,24220,8566570	1126609,9404996
2621	20894,86076,3682610	1119951,1625925	2671	21456,50830,7971566	1126743,9854027
2622	20906,06027,5308535	1120088,8411486	2672	21467,77574,7825593	1126877,9568164
2623	20917,26116,3720021	1120226,4448976	2673	21479,04452,7393757	1127011,8547669
2624	20928,46342,8168997	1120363,9738669	2674	21490,31464,5941426	1127145,6797803
2625	20939,66706,7907666	1120501,4280842	2675	21501,58610,2734229	1127279,4303829
2626	20950,87208,2188509	1120638,8075771	2676	21512,85889,7038058	1127413,1081008
2627	20962,07847,0264280	1120776,1123728	2677	21524,13302,8119066	1127546,7124601
2628	20973,28623,1388008	1120913,3424989	2678	21535,40842,5243667	1127680,2434867
2629	20984,49536,4812997	1121050,4979829	2679	21546,68529,7678534	1127813,7012069
2630	20995,70586,9792826	1121187,5788520	2680	21557,96343,4690603	1127947,0856465
2631	21006,91774,5581346	1121324,5851337	2681	21569,24290,5547068	1128080,3968317
2632	21018,13099,1432684	1121461,5168553	2682	21580,52370,9515385	1128213,6347883
2633	21029,34560,6601237	1121598,3740442	2683	21591,80584,5863268	1128346,7995424
2634	21040,56159,0341679	1121735,1567275	2684	21603,08931,3858692	1128479,8911198
2635	21051,77894,108954	1121871,8649326	2685	21614,37411,2769890	1128612,9095463
2636	21062,99766,0558280	1122008,4986866	2686	21625,66024,1865353	1128745,8548480
2637	21074,21774,5545147	1122145,0580168	2687	21636,94770,0413833	1128878,7270505
2638	21085,43919,6125315	1122281,5429504	2688	21648,23648,7684338	1129011,5261798
2639	21096,66201,1554819	1122417,9535144	2689	21659,52660,2946137	1129144,2522616
2640	21107,88619,1089963	1122554,2897360	2690	21670,81804,5468753	1129276,9053216
2641	21119,11173,3987323	1122690,5516423	2691	21682,11081,4521969	1129409,4853857
2642	21130,33863,9503745	1122826,7392603	2692	21693,40490,9375826	1129541,9924794
2643	21141,56690,6896348	1122962,8526170	2693	21704,70032,9300620	1129674,4266285
2644	21152,79653,5422518	1123098,8917395	2694	21715,99707,3566905	1129806,7878586
2645	21164,02752,4339913	1123234,8566547	2695	21727,29514,1445490	1129939,0761953
2646	21175,25987,2976460	1123370,7473896	2696	21738,59453,2207443	1130071,2916643
2647	21186,49358,0380356	1123506,5639711	2697	21749,89524,5124087	1130203,4342111
2648	21197,72864,6020067	1123642,3064260	2698	21761,19727,9466998	1130335,5041013
2649	21208,96506,9084327	1123777,9747813	2699	21772,50063,4508011	1130467,5911203
2650	21220,20284,8832140	1123913,5690637	2700	21783,80530,9519214	1130599,4253738

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
2701	21795,11130,3772952	1130731,2768870	2751	22362,07704,3332137	1137231,6642239
2702	21806,41861,6541822	1130863,0556856	2752	22373,44935,9974376	1137359,8391633
2703	21817,72724,7098679	1130994,7617949	2753	22384,82295,8366009	1137487,9426520
2704	21829,03719,4716628	1131126,3952403	2754	22396,19783,7792529	1137615,9747141
2705	21840,34845,8669031	1131257,9560471	2755	22407,57399,7539670	1137743,9353736
2706	21851,66103,8229502	1131389,4442408	2756	22418,95143,6893406	1137871,8246548
2707	21862,97493,2671910	1131520,8598466	2757	22430,33015,5139954	1137999,6425816
2708	21874,29014,1270376	1131652,2028898	2758	22441,71015,1565770	1138127,3891781
2709	21885,60666,3299274	1131783,4733956	2759	22453,09142,5457551	1138255,0644683
2710	21896,92449,8033230	1131914,6713894	2760	22464,47397,6100234	1138382,6684761
2711	21908,24364,4747124	1132045,7968962	2761	22475,85780,2786995	1138510,2012257
2712	21919,56410,2716086	1132176,8499414	2762	22487,24290,4799253	1138637,6627409
2713	21937,88587,1215501	1132307,8305501	2763	22498,62928,1426662	1138765,0530457
2714	21942,20894,9521002	1132438,7387473	2764	22510,01693,1957118	1138892,3721637
2715	21953,53333,6908475	1132569,5745583	2765	22521,40585,5678755	1139019,6201192
2716	21964,85903,2654058	1132700,3380081	2766	22532,79605,1879947	1139146,7969358
2717	21976,18603,6034139	1132831,0291216	2767	22544,18751,9849305	1139273,9026373
2718	21987,51434,6325355	1132961,6479241	2768	22555,58025,8875678	1139400,9372476
2719	21998,84396,2804596	1133092,1944405	2769	22566,97426,8248154	1139527,9007905
2720	22010,17488,4749001	1133222,6686957	2770	22578,36954,7256059	1139654,7932896
2721	22021,50711,1435959	1133353,0707148	2771	22589,76609,5188956	1139781,6147688
2722	22032,84064,2143107	1133483,4005226	2772	22601,16391,1336644	1139908,3652517
2723	22044,17547,6148333	1133613,6581441	2773	22612,56299,4989161	1140035,0447621
2724	22055,51161,2729775	1133743,8436042	2774	22623,96334,5436782	1140161,6533235
2725	22066,84905,1165817	1133873,9569276	2775	22635,36496,1970017	1140288,1909595
2726	22078,18779,0735093	1134003,9981393	2776	22646,76784,3879512	1140414,5576939
2727	22089,52783,0716486	1134133,9672640	2777	22658,17199,0456551	1140541,0535502
2728	22100,86917,0389126	1134263,5643266	2778	22669,57740,0992053	1140667,3785520
2729	22112,21180,9032392	1134393,6893516	2779	22680,98407,4777573	1140793,6327227
2730	22123,55574,5925908	1134523,4423641	2780	22692,39201,1104800	1140919,8160859
2731	22134,90098,0349549	1134653,1233885	2781	22703,80120,9266569	1141045,9286652
2732	22146,24751,1583434	1134782,7324496	2782	22715,21166,8552311	1141171,9704839
2733	22157,59533,8907930	1134912,2695720	2783	22726,62338,8257150	1141297,9415655
2734	22168,94446,1603650	1135041,7347805	2784	22738,03636,7672805	1141423,8419335
2735	22180,29487,8951455	1135171,1280995	2785	22749,45060,6092140	1141549,6716111
2736	22191,64659,0232450	1135300,4495536	2786	22760,86610,2808251	1141675,4306219
2737	22202,99959,4727986	1135429,6991675	2787	22772,28285,7114470	1141801,1189891
2738	22214,35389,1719661	1135558,8769656	2788	22783,70086,8304361	1141926,7367361
2739	22225,70948,0459317	1135687,9822725	2789	22795,12013,5671722	1142052,2838862
2740	22237,05636,0319042	1135817,0172126	2790	22806,54065,8510584	1142177,7604626
2741	22248,42453,0491168	1135945,9797104	2791	22817,96243,6115210	1142303,1664887
2742	22259,78399,0288272	1136074,8704903	2792	22829,38546,7780097	1142428,5019876
2743	22271,14473,8993174	1136203,6895767	2793	22840,80975,2799973	1142553,7669826
2744	22282,50677,5888942	1136332,4369940	2794	22852,23529,0469799	1142678,9614968
2745	22293,87010,0258882	1136461,1127657	2795	22863,66208,0084767	1142804,0855534
2746	22305,23471,1386549	1136589,7169189	2796	22875,09012,0940300	1142929,1391756
2747	22316,60060,8555738	1136718,2494750	2797	22886,51941,2332056	1143054,1223864
2748	22327,96779,1050288	1136846,7104593	2798	22897,94995,3555920	1143179,0352090
2749	22339,33625,8155081	1136975,0998961	2799	22909,38174,3908010	1143303,8776664
2750	22350,70600,9154042	1137103,4178095	2800	22920,81478,2684674	1143428,6497817

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
2801	22932,24906,9182491	1143553,3515780	2851	23505,53875,9703383	1149699,2867293
2802	22943,68460,2698271	1143677,9830781	2852	23517,03575,2570676	1149820,4322513
2803	22955,12138,2529052	1143802,5443051	2853	23528,53395,6893189	1149941,5086203
2804	22966,55940,7972102	1143927,0352819	2854	23540,03337,1979392	1150062,5158583
2805	22977,99867,8324922	1144051,4560315	2855	23551,53399,7137975	1150183,4539870
2806	22989,43919,2885237	1144175,8065769	2856	23563,03583,1677845	1150304,3230282
2807	23000,88095,0951026	1144300,0869407	2857	23574,53887,4908127	1150425,1230039
2808	23012,32395,1820413	1144424,2971461	2858	23586,04312,6138166	1150545,8539356
2809	23023,76819,4791874	1144548,4372157	2859	23597,54858,4677522	1150666,5158451
2810	23035,21367,9164031	1144672,5071723	2860	23609,05524,9835973	1150787,1087542
2811	23046,66040,4235754	1144796,5070390	2861	23620,56312,0923515	1150907,6326844
2812	23058,10836,9306144	1144920,4368382	2862	23632,07219,7250359	1151028,0876576
2813	23069,55757,3674526	1145044,2965929	2863	23643,58247,8126935	1151148,4736952
2814	23081,00801,6640455	1145168,0863257	2864	23655,09395,2863887	1151268,7908191
2815	23092,45969,7503711	1145291,8060594	2865	23666,60665,0772078	1151389,0390507
2816	23103,91261,5564305	1145415,4558166	2866	23678,12054,1162585	1151509,2184117
2817	23115,36677,0122471	1145539,0356199	2867	23689,63563,3346702	1151629,3239235
2818	23126,82216,0478670	1145662,5454922	2868	23701,15192,6635937	1151749,3706078
2819	23138,27378,5933592	1145785,9854958	2869	23712,66942,0342015	1151869,3434861
2820	23149,73664,5788150	1145909,3555335	2870	23724,16811,3776876	1151989,2475798
2821	23161,19573,9343485	1146032,6557478	2871	23735,70800,6252674	1152109,0829105
2822	23172,65606,5970963	1146155,8861213	2872	23747,22909,7081779	1152228,8494996
2823	23184,11762,4762175	1146279,0466764	2873	23758,75138,5576775	1152348,5473684
2824	23195,58041,5228939	1146402,1374357	2874	23770,27487,1050459	1152468,1765386
2825	23207,24443,6603296	1146525,1584217	2875	23781,79955,2815845	1152587,7370314
2826	23218,50968,8187513	1146648,1096568	2876	23793,32543,0186159	1152707,2238681
2827	23229,97516,9281081	1146770,9911634	2877	23804,85250,2474840	1152826,6520702
2828	23241,44387,9195715	1146893,8029640	2878	23816,38076,8995543	1152946,0066590
2829	23252,91281,7225355	1147016,5450809	2879	23827,91022,9062133	1153065,2926558
2830	23264,38298,2676164	1147139,2175366	2880	23839,44088,1988691	1153184,5100818
2831	23275,85437,4851530	1147261,8203534	2881	23850,97272,7089509	1153303,6589584
2832	23287,32699,3055064	1147384,3535535	2882	23862,50576,3679093	1153422,7393068
2833	23298,80083,6590599	1147506,8171593	2883	23874,03999,1072161	1153541,7511481
2834	23310,27590,4762193	1147629,2111931	2884	23885,57540,8583642	1153660,6945037
2835	23321,75219,6874124	1147751,5356772	2885	23897,11201,5528679	1153779,5693946
2836	23333,22971,2230896	1147873,7906337	2886	23908,64981,1222626	1153898,3758421
2837	23344,70845,0137233	1147995,9760849	2887	23920,18879,4981047	1154017,1138673
2838	23356,18840,9898082	1148118,0920529	2888	23931,72896,6119719	1154135,7834912
2839	23367,66959,0818611	1148240,1385600	2889	23943,27032,3954631	1154254,3847351
2840	23379,15199,2204211	1148362,1156283	2890	23954,81286,7801982	1154372,9176199
2841	23390,63561,3360494	1148484,0232798	2891	23966,35659,6978181	1154491,3821667
2842	23402,12045,3593292	1148605,8615368	2892	23977,90151,0799848	1154609,7783967
2843	23413,60651,2208661	1148727,6304213	2893	23989,44760,8583815	1154728,1063306
2844	23425,09378,8512874	1148849,3299553	2894	24000,99488,9647121	1154845,3659897
2845	23436,58228,1812427	1148970,9601610	2895	24012,54335,3307018	1154964,5573948
2846	23448,07199,1414037	1149092,5210602	2896	24024,09299,8880966	1155082,6805669
2847	23459,56291,6624639	1149214,0126750	2897	24035,64382,5686635	1155200,7355269
2848	23471,05505,6751389	1149335,4350274	2898	24047,19583,3041904	1155318,7222958
2849	23482,54841,1101663	1149456,7881393	2899	24058,74902,2264862	1155436,6408948
2850	23494,04297,8983056	1149578,0720326	2900	24070,30338,6673805	1155554,4913435

<i>Vers. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>	<i>Vers. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>
2901	24081,85893,1587241	1155672,2736641	2951	24661,12376,9933144	1161474,9805895
2902	24093,41565,4323882	1155789,9878770	2952	24672,73851,9739040	1161589,3155244
2903	24104,97355,4202652	1155907,6347030	2953	24684,35441,2894284	1161703,5833870
2904	24116,53263,0542682	1155025,2120628	2954	24695,97144,8728154	1161817,7841972
2905	24128,09288,2663310	1156142,7220773	2955	24707,58962,6570126	1161931,9179747
2906	24139,65430,9884083	1156260,1640671	2956	24719,20894,5749873	1162045,9847394
2907	24151,21691,1524754	1156377,5387531	2957	24730,82940,5597267	1162159,9845109
2908	24162,78068,6905285	1156494,8440558	2958	24742,45100,5442376	1162273,9173089
2909	24174,34563,5345844	1156612,0820961	2959	24754,07374,4615464	1162387,7831531
2910	24185,91175,6166805	1156729,2521945	2960	24765,59762,2446995	1162501,5820633
2911	24197,47904,8688750	1156846,3543717	2961	24777,32263,8267628	1162615,3140590
2912	24209,04751,2232467	1156963,3886484	2962	24788,94879,1408218	1162729,9791599
2913	24220,61714,6118951	1157080,3550450	2963	24800,57608,1199817	1162842,5773857
2914	24232,18794,9669401	1157197,2535824	2964	24812,24506,6973674	1162956,1087558
2915	24243,75992,2205225	1157314,0842808	2965	24823,83406,8061232	1163069,5732900
2916	24255,33306,3048033	1157430,8471610	2966	24835,16476,3794132	1163182,9710076
2917	24266,90737,1519643	1157547,5422435	2967	24847,09659,3504208	1163296,3019284
2918	24278,48284,6942078	1157664,1695486	2968	24858,72955,6523492	1163409,5600718
2919	24290,05948,8637564	1157780,7290971	2969	24870,36365,2184210	1163522,7634573
2920	24301,63729,5928535	1157897,2209091	2970	24881,99887,9818783	1163635,8941044
2921	24313,21625,8137626	1158013,6450054	2971	24893,63523,8759828	1163748,9580326
2922	24324,79640,4587680	1158130,0014062	2972	24905,27272,8340154	1163861,9552612
2923	24336,37770,4601742	1158246,2901319	2973	24916,91134,7892766	1163974,8858098
2924	24347,96016,7503061	1158362,5112030	2974	24928,55109,6750864	1164087,7496978
2925	24359,54379,2615091	1158478,6646398	2975	24940,19197,4247842	1164200,5469444
2926	24371,12857,2261490	1158594,7504626	2976	24951,83397,9717286	1164313,2775691
2927	24382,71452,6766116	1158710,7686918	2977	24963,47711,2492977	1164425,9415913
2928	24394,30163,4453034	1158826,7193477	2978	24975,12137,1908890	1164538,5390302
2929	24405,88990,1646511	1158942,6024505	2979	24986,76675,7299192	1164651,0699053
2930	24417,47932,7671016	1159058,4180205	2980	24998,41326,7998245	1164763,5342356
2931	24429,06991,1851221	1159174,1660780	2981	25010,06090,3340601	1164875,9320407
2932	24440,66165,3512001	1159289,8466431	2982	25021,70966,2661008	1164988,2633397
2933	24452,25455,1978432	1159405,4597351	2983	25033,35954,5294405	1165100,5281517
2934	24463,84860,6575793	1159521,0053772	2984	25045,01055,0575922	1165212,7264962
2935	24475,44381,6629565	1159636,4835865	2985	25056,66267,7840884	1165324,8583922
2936	24487,04018,1465430	1159751,8943842	2986	25068,31592,6424806	1165436,9238589
2937	24498,63770,0409272	1159867,2377903	2987	25079,97029,5663396	1165548,9229155
2938	24510,23637,2787175	1159982,5138250	2988	25091,62578,4892551	1165660,8555812
2939	24521,83619,7925425	1160097,7225085	2989	25103,28239,3448363	1165772,7218751
2940	24533,43717,5150510	1160212,8638606	2990	25114,94012,0667114	1165884,5218162
2941	24545,03930,3789116	1160327,9379015	2991	25126,59896,5885276	1165996,2554236
2942	24556,64258,3168131	1160442,9446513	2992	25138,25892,8439512	1166107,9227165
2943	24568,24701,2614644	1160557,8841298	2993	25149,92000,7666677	1166219,5237138
2944	24579,85259,1455942	1160672,7563572	2994	25161,58220,2903815	1166331,0584347
2945	24591,45931,9019514	1160787,5613533	2995	25173,24551,3488162	1166442,5268981
2946	24603,06719,4633046	1160902,2991381	2996	25184,90993,8757143	1166553,9291229
2947	24614,67621,7624427	1161016,9697315	2997	25196,57547,8048371	1166665,2651283
2948	24626,28638,7321743	1161131,5731535	2998	25208,24213,0699654	1166776,5349331
2949	24637,89770,3053278	1161246,1094239	2999	25219,90989,6048985	1166887,7385562
2950	24649,51016,4147517	1161360,5785627	3000	25231,57877,3434547	1166998,8760167

<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>	<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>
3001	25243,24876,2194714	1167109,9473333	3051	25828,15063,5688146	1172579,5921826
3002	25254,91986,1668047	1167220,9525251	3052	25839,87643,1609972	1172687,3148015
3003	25265,52207,1193298	1167331,8916108	3053	25851,60330,4757988	1172794,9722345
3004	25278,26539,0109406	1167442,7646092	3054	25863,33125,4480333	1172902,5644996
3005	25289,93981,7755498	1167553,5715393	3055	25875,06228,0125328	1173010,0916146
3006	25301,61535,3470891	1167664,3124198	3056	25886,79038,1041474	1173117,5535974
3007	25313,29199,6595090	1167774,9872695	3057	25898,52155,6577449	1173224,9504661
3008	25324,96974,6467785	1167885,5961073	3058	25910,25380,6082110	1173332,2822384
3009	25336,64860,2428858	1167996,1389517	3059	25921,98712,8904494	1173439,5489322
3010	25348,32856,3818375	1168106,6158217	3060	25933,72152,4393816	1173546,7505654
3011	25360,00962,9976592	1168217,0267358	3061	25945,45699,1899471	1173653,8871558
3012	25371,69180,0243950	1168327,3717128	3062	25957,19353,0771029	1173760,9587212
3013	25383,37507,3961078	1168437,0507714	3063	25968,93114,0358241	1173867,9652794
3014	25395,05945,0468792	1168547,8639302	3064	25980,66982,0011035	1173974,9068481
3015	25406,74492,9108094	1168658,0112080	3065	25992,40956,9079516	1174081,7834452
3016	25418,43150,9220174	1168768,0926232	3066	26004,15038,6913968	1174188,5950883
3017	25430,11919,0146406	1168878,1081945	3067	26015,89227,2864851	1174295,3417953
3018	25441,80797,1228351	1168988,0579405	3068	26027,63522,6282804	1174402,0235838
3019	25453,42785,1807756	1169097,9418799	3069	26039,37924,6518642	1174508,6404714
3020	25465,18883,1226555	1169207,7600311	3070	26051,12433,2923355	1174615,1924759
3021	25476,88090,8826866	1169317,5124126	3071	26062,87048,4848114	1174721,6796149
3022	25488,57408,3950992	1169427,1290430	3072	26074,61770,1644263	1174828,1019061
3023	25500,26835,5941422	1169536,8199408	3073	26086,36598,2663324	1174934,4593670
3024	25511,96372,4140830	1169646,3751244	3074	26098,11532,7256994	1175040,7520154
3025	25523,66018,7892074	1169755,8646125	3075	26109,86573,4777148	1175146,9798687
3026	25535,35774,6538129	1169865,2884232	3076	26121,61720,4575835	1175253,1429445
3027	25547,05639,9422431	1169974,6465752	3077	26133,36973,6005280	1175359,2412605
3028	25558,75614,5888183	1170083,9390868	3078	26145,12332,8417885	1175465,2748340
3029	25570,45695,5279051	1170193,1659763	3079	26156,87798,1166225	1175571,2436828
3030	25582,15891,6938814	1170302,3272624	3080	26168,63369,3603054	1175677,1478242
3031	25593,86194,0211438	1170411,4229631	3081	26180,39046,5081296	1175782,9872757
3032	25605,56505,4441069	1170520,4530969	3082	26192,14829,4954052	1175888,7620548
3033	25617,27125,8972037	1170629,4176821	3083	26203,90718,2574600	1175994,4721790
3034	25628,97755,3148858	1170738,3167369	3084	26215,66712,7296390	1176100,1176656
3035	25640,68493,6316227	1170847,1502798	3085	26227,42812,8473046	1176205,6985322
3036	25652,39340,7819025	1170955,9183289	3086	26239,19018,5458368	1176311,2147960
3037	25664,10296,7002314	1171064,6209025	3087	26250,95329,7606328	1176416,6664746
3038	25675,81361,3211339	1171173,2580188	3088	26262,71746,4271074	1176522,0535851
3039	25687,52534,5791527	1171281,8296961	3089	26274,48268,4806925	1176627,3761452
3040	25699,23816,4088488	1171390,3359525	3090	26286,24895,8568377	1176732,6341719
3041	25710,95206,7448014	1171498,7768063	3091	26298,01628,4910096	1176837,8276827
3042	25722,66705,5216076	1171607,1522755	3092	26309,78466,3186924	1176942,9566948
3043	25734,38312,6738831	1171715,4623783	3093	26321,55499,2753872	1177048,0212257
3044	25746,10028,1362614	1171823,7071329	3094	26333,32457,2966129	1177153,0212923
3045	25757,81851,8433943	1171931,8865573	3095	26345,09610,3179052	1177257,9569121
3046	25769,53783,7299516	1172040,0006697	3096	26356,86868,2748173	1177362,8281024
3047	25781,25823,7306213	1172148,0494880	3097	26368,64231,1029197	1177467,6348871
3048	25792,97971,7801093	1172256,0330305	3098	26380,41698,7377998	1177572,3772628
3049	25804,70227,8131398	1172363,9513151	3099	26392,19271,1150626	1177677,0552673
3050	25816,42591,7644549	1172471,8043598	3100	26403,96948,1703299	1177781,6689110

Verf. Sine.	Area of Segment.	Difference.	Verf. Sine.	Segment.	Difference.
3101	26415,74729,8392409	1177886,2182110	3151	27005,95778,2797730	1183732,0191397
3102	26427,52616,0574519	1177990,7031841	3152	27017,78810,2988427	1183133,3092646
3103	26439,30606,7606364	1178095,1238484	3153	27022,61943,6081073	1183234,5359150
3104	26451,08701,8844848	1178199,4802200	3154	27041,45178,1440223	1183335,6991072
3105	26462,86901,3647048	1178303,7723163	3155	27053,28513,8431295	1183436,7988574
3106	26474,65205,1370210	1178408,0001544	3156	27065,11950,6419869	1183537,8351819
3107	26486,43613,1371754	1178512,1637513	3157	27076,95488,4771688	1183638,8080970
3108	26498,22125,3009267	1178616,2631241	3158	27088,79127,2852658	1183739,7176187
3109	26510,00741,5640508	1178720,2982897	3159	27100,62867,0028846	1183840,5637636
3110	26521,79461,8623405	1178824,2692653	3160	27112,46707,5666482	1183941,3465476
3111	26533,58286,1316058	1178928,1760677	3161	27124,30648,9131958	1184042,0659869
3112	26545,37214,3076735	1179032,0187139	3162	27136,14690,9791827	1184142,7220978
3113	26557,16246,3263874	1179135,7972210	3163	27147,98833,7012805	1184243,3148963
3114	26568,95382,1236084	1179239,5116057	3164	27159,83077,0161768	1184343,8443986
3115	26580,74621,6352141	1179343,1618550	3165	27171,67420,8605754	1184444,3106208
3116	26592,53964,7970991	1179446,7480759	3166	27183,51865,1711962	1184544,7135791
3117	26604,33411,5451751	1179550,2701952	3167	27195,36409,8447753	1184645,0532894
3118	26616,12961,8153703	1179653,7282598	3168	27207,21054,9350647	1184745,3297679
3119	26627,92615,5436301	1179757,1222866	3169	27219,05800,2678326	1184845,5430307
3120	26639,72372,6659167	1179860,4522922	3170	27230,90645,8108633	1184945,6930937
3121	26651,52233,1182089	1179963,7182937	3171	27242,75591,5039570	1185045,7799730
3122	26663,32196,835027	1180066,9203078	3172	27254,60637,2839300	1185145,8035846
3123	26675,12263,7568105	1180170,0583512	3173	27266,45783,0876146	1185245,7642445
3124	26686,92433,8151617	1180273,1324409	3174	27278,31028,8518591	1185345,6616686
3125	26698,72706,9476026	1180376,1425934	3175	27290,16374,5135277	1185445,4959730
3126	26710,53083,0901960	1180479,0888255	3176	27302,01820,0095007	1185545,2671735
3127	26722,33562,1790215	1180581,9711540	3177	27313,87365,2766742	1185644,9752862
3128	26734,14144,1501755	1180684,7895956	3178	27325,73010,2519604	1185744,6203269
3129	26745,94828,9397711	1180787,5441670	3179	27337,58754,8722873	1185844,2023114
3130	26757,75616,4839381	1180890,2347847	3180	27349,44599,0745987	1185943,7212558
3131	26769,56506,7188228	1180992,8617656	3181	27361,30542,7988545	1186043,1771759
3132	26781,37499,5805884	1181095,4242261	3182	27373,16585,9730304	1186142,5700875
3133	26793,18593,0054145	1181197,9240831	3183	27385,02728,5431179	1186241,9000064
3134	26804,99792,9294976	1181300,3595530	3184	27396,88970,4431243	1186341,1669485
3135	26816,81093,2890506	1181402,7312524	3185	27408,75311,6100728	1186440,3709297
3136	26828,62496,0203030	1181505,0391979	3186	27420,61751,9810025	1186539,5119655
3137	26840,44001,0595009	1181607,2834062	3187	27432,48291,4929680	1186638,5900720
3138	26852,25608,3429072	1181709,4638937	3188	27444,34930,0830400	1186737,6052646
3139	26864,07317,8068009	1181811,5806769	3189	27456,21667,6883048	1186836,5575596
3140	26875,89129,3874778	1181913,6337725	3190	27468,08504,2458644	1186935,4469723
3141	26887,71043,0212503	1182015,6231968	3191	27479,95439,6928367	1187034,2735185
3142	26899,53058,6444471	1182117,5489663	3192	27491,82473,9653552	1187133,0372138
3143	26911,35176,1934134	1182219,4110976	3193	27503,69607,0035690	1187231,7380741
3144	26923,17395,6045110	1182321,2096070	3194	27515,56838,7416431	1187330,3761190
3145	26934,99716,8141180	1182422,9445110	3195	27527,44159,1177581	1187428,9513521
3146	26946,82139,7586290	1182524,6158260	3196	27539,31998,0691102	1187527,4638010
3147	26958,64664,3744550	1182626,2235684	3197	27551,19125,5329112	1187625,9134775
3148	26970,47290,5980234	1182727,7677547	3198	27563,06751,4463887	1187724,3003970
3149	26982,30018,3657781	1182829,2484010	3199	27575,94475,7467857	1187822,6245752
3150	26994,12847,6141791	1182930,6655239	3200	27586,82298,3719609	1187920,8860277

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
3201	27598,70219,2573886	1188019,0847701	3251	28193,90165,1868264	1192849,4060259
3202	27610,58238,3421587	1188117,2208178	3252	28205,83014,5928523	1192944,4268390
3203	27622,46355,5629765	1188215,2941865	3253	28217,75959,0196913	1193039,3857310
3204	27634,34570,8571630	1188313,3048915	3254	28229,68998,4054223	1193134,2827164
3205	27646,22884,1620546	1188411,2529486	3255	28241,62132,6881387	1193229,1178102
3206	27658,11295,4150032	1188509,1383731	3256	28253,55361,8059489	1193323,8910269
3207	27669,99804,5533763	1188606,9611804	3257	28265,48685,6969758	1193418,6023815
3208	27681,88411,5145567	1188704,7213862	3258	28277,42104,2993573	1193513,2518885
3209	27693,77116,2359429	1188802,4190058	3259	28289,35617,5512458	1193607,8395629
3210	27705,65918,6549487	1188900,0540546	3260	28301,29225,3908087	1193702,3654191
3211	27717,54818,7090033	1188997,6265480	3261	28313,22927,7562278	1193796,8294719
3212	27729,43816,3355513	1189095,1365015	3262	28325,16724,5856997	1193891,2317360
3213	27741,32911,4720528	1189192,5839304	3263	28337,10615,6174357	1193985,5722260
3214	27753,22104,0559832	1189289,9688502	3264	28349,04601,3896617	1194079,8509566
3215	27765,11324,0248334	1189387,2912761	3265	28360,98681,2406183	1194174,0679425
3216	27777,00781,3161095	1189484,5512235	3266	28372,92855,3085608	1194268,2231981
3217	27788,90265,8673330	1189581,7487077	3267	28384,87123,5317589	1194362,3167381
3218	27800,79847,6160408	1189678,8837441	3268	28396,81485,8484970	1194456,3485772
3219	27812,69526,4997849	1189775,9563478	3269	28408,75942,1970742	1194550,3187298
3220	27824,59302,24561327	1189872,9665344	3270	28420,70492,5158040	1194644,2272106
3221	27836,49175,4226671	1189969,9143189	3271	28432,65136,7430146	1194738,0747340
3222	27848,39145,3369860	1190066,7997166	3272	28444,59874,8170486	1194831,8592146
3223	27860,29212,1367026	1190163,6227427	3273	28456,54705,6762632	1194925,5827669
3224	27872,19375,7594453	1190260,3834126	3274	28468,49632,2590301	1195019,2447055
3225	27884,09636,1428579	1190357,0817413	3275	28480,44651,5037356	1195112,8450447
3226	27895,99993,2245992	1190453,7177441	3276	28492,39764,3487803	1195206,3837991
3227	27907,90446,9423434	1190550,2914362	3277	28504,34970,7325794	1195299,8609832
3228	27919,80997,2337796	1190646,8028327	3278	28516,30270,5935626	1195393,2766113
3229	27931,71644,0366123	1190743,2519487	3279	28528,25663,8701739	1195486,6306979
3230	27943,62387,2885510	1190839,6387995	3280	28540,21150,5008718	1195579,9232575
3231	27955,53226,9273605	1190935,9634001	3281	28552,16730,4241293	1195673,1543044
3232	27967,44162,8907606	1191032,2257656	3282	28564,12403,5784337	1195766,3238529
3233	27979,35195,1165262	1191128,4259111	3283	28576,08169,9022866	1195859,4319175
3234	27991,26323,5424373	1191224,5638517	3284	28588,04029,3342042	1195952,4785127
3235	28003,17548,1062890	1191320,6396025	3285	28599,99981,8127169	1196045,4636526
3236	28015,08868,7458915	1191416,6531783	3286	28611,96027,2763695	1196138,3873516
3237	28027,00285,3990698	1191512,6045945	3287	28623,92165,6637211	1196231,2496241
3238	28038,91798,0036643	1191608,4938659	3288	28635,88396,9133452	1196324,0504843
3239	28050,83406,4975302	1191704,3210074	3289	28647,84720,9638294	1196416,7899465
3240	28062,75110,8185376	1191800,0860343	3290	28659,81137,7537759	1196509,4680251
3241	28074,66910,9045719	1191895,7889614	3291	28671,77647,2218010	1196602,0847342
3242	28086,58806,6935333	1191991,4298035	3292	28683,74249,3065352	1196694,6400881
3243	28098,50798,1233368	1192087,0085758	3293	28695,70943,9466233	1196787,1341012
3244	28110,42885,1319126	1192182,5252931	3294	28707,67731,0807245	1196879,5667874
3245	28122,35067,6572057	1192277,9799704	3295	28719,64610,6475119	1196971,9381672
3246	28134,27345,6371761	1192373,3726224	3296	28731,61582,5856731	1197064,2482367
3247	28146,19719,0097985	1192468,7032642	3297	28743,58646,8339098	1197156,4970280
3248	28158,12187,7130627	1192563,9719106	3298	28755,55803,3309378	1197248,6845493
3249	28170,04751,6849733	1192659,1785765	3299	28767,53052,0154871	1197340,8108148
3250	28181,97410,8635498	1192754,3232766	3300	28779,50392,8263019	1197432,8758387

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
3301	28791,47825,7021406	1197524,8796350	3351	29391,35503,0552014	1202047,3124813
3302	28803,45350,5817756	1197616,8222178	3352	29403,37550,3676827	1202136,2120833
3303	28815,42967,4039934	1197708,7036013	3353	29415,39686,5797660	1202225,0511736
3304	28827,40676,1075947	1197800,5237994	3354	29427,41911,6309396	1202313,8297656
3305	28839,38476,6313941	1197892,2828265	3355	29439,44225,4607052	1202402,5478727
3306	28851,36368,9142206	1197983,9876964	3356	29451,46628,0085779	1202491,2055083
3307	28863,34352,8949170	1198075,6174232	3357	29463,49119,2140862	1202579,8026858
3308	28875,32428,5123402	1198167,1930208	3358	29475,51699,0167720	1202668,3394185
3309	28887,30595,7053610	1198258,7075035	3359	29487,54367,3561905	1202756,8157198
3310	28899,28854,4128645	1198350,1608851	3360	29499,57124,1719103	1202845,2316029
3311	28911,27204,5737496	1198441,5531796	3361	29511,59969,4035132	1202933,5870813
3312	28923,25646,1269293	1198532,8844011	3362	29523,62902,9905945	1203021,8821683
3313	28935,24179,0113304	1198624,1545634	3363	29535,65924,8727628	1203110,1168771
3314	28947,22803,1558938	1198715,3636805	3364	29547,69034,9896399	1203198,2912210
3315	28959,21518,5295743	1198806,5117664	3365	29559,72233,2808609	1203286,4052133
3316	28971,20325,0413407	1198897,5988350	3366	29571,75519,6860743	1203374,4588672
3317	28983,19222,6401757	1198988,6249001	3367	29583,78894,1449415	1203462,4521961
3318	28995,18211,2650758	1199079,5899757	3368	29595,82356,5971376	1203550,3852131
3319	29007,17290,8550515	1199170,4940757	3369	29607,85906,9823507	1203638,2579314
3320	29019,16461,3491272	1199251,3372138	3370	29619,89545,2402820	1203726,0703642
3321	29031,15722,6863410	1199352,1194040	3371	29631,93271,3106462	1203813,38225248
3322	29043,15074,8057450	1199442,8406602	3372	29643,97085,1331711	1203901,5144263
3323	29055,14517,6464052	1199533,5009960	3373	29656,00986,6475974	1203989,1460819
3324	29067,14051,1474012	1199624,1004255	3374	29668,04975,7936793	1204076,7175048
3325	29079,13675,2478267	1199714,6389622	3375	29680,09052,5111841	1204164,2287080
3326	29091,13389,8867889	1199805,1166201	3376	29692,13216,7398921	1204251,6797047
3327	29103,13195,0034090	1199895,5334129	3377	29704,17468,4195968	1204339,0705081
3328	29115,13090,5368219	1199985,8893543	3378	29716,21807,4901049	1204426,4011312
3329	29127,13076,4261763	1200076,1844582	3379	29728,26233,8912360	1204513,6715871
3330	29139,13152,6106344	1200166,4187382	3380	29740,30747,5628231	1204600,8818889
3331	29151,13319,0293726	1200256,5922080	3381	29752,35348,4447120	1204688,0320496
3332	29163,13575,6215806	1200346,7048813	3382	29764,40036,4767616	1204775,1220824
3333	29175,13922,3264619	1200436,7567720	3383	29776,44811,5988440	1204862,1520002
3334	29187,14359,0832339	1200526,7478936	3384	29788,49673,7508442	1204949,1218161
3335	29199,14885,8311275	1200616,6782597	3385	29800,54622,8726603	1205036,0315431
3336	29211,15502,5093872	1200706,5478841	3386	29812,59658,9042034	1205122,8811941
3337	29223,16209,0572713	1200796,3567804	3387	29824,64781,7853975	1205209,6707823
3338	29235,17005,4140517	1200886,1049621	3388	29836,69991,4561798	1205296,4003205
3339	29247,17891,5190138	1200975,7924430	3389	29848,75287,8565003	1205383,0698217
3340	29259,18867,3114568	1201065,4192366	3390	29860,80670,9263219	1205469,6792988
3341	29271,19932,7306935	1201154,9853565	3391	29872,86140,6056208	1205556,2287649
3342	29283,21087,7160500	1201244,4908163	3392	29884,91696,8343857	1205642,7182328
3343	29295,22332,2068663	1201333,9356295	3393	29896,97339,5526184	1205729,1477154
3344	29307,23566,1424958	1201423,3198097	3394	29909,03068,7003338	1205815,5172256
3345	29319,25089,4623055	1201512,6433704	3395	29921,08884,2175594	1205901,8267764
3346	29331,26602,1056759	1201601,9063251	3396	29933,14786,0443358	1205988,0763806
3347	29343,28204,0120010	1201691,1086873	3397	29945,20774,1207164	1206074,2660510
3348	29355,29895,1206883	1201780,2504706	3398	29957,26848,3867674	1206160,3958005
3349	29367,31675,3711589	1201869,3316884	3399	29969,33008,7825679	1206246,4656419
3350	29379,33544,7028473	1201958,3523541	3400	29981,39255,2482098	1206332,4755881

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
3401	29993,45587,7237979	1206418,4256520	3451	30597,70554,2152044	1210639,8582039
3402	30005,52006,1494499	1206504,3158460	3452	30609,81194,0734083	1210722,7709591
3403	30017,58510,4652959	1206590,1461834	3453	30621,91916,8443674	1210805,6244809
3404	30029,65100,6114793	1206675,9166766	3454	30634,02722,4688483	1210888,4187816
3405	30041,71776,5281559	1206761,6273385	3455	30646,13610,8876299	1210971,1538732
3406	30053,78538,1554944	1206847,2781820	3456	30658,24582,0415030	1211053,8297679
3407	30065,85385,4336764	1206932,8692192	3457	30670,35635,8712709	1211136,4464777
3408	30077,92318,3028956	1207018,4004638	3458	30682,46772,3177486	1211219,0040150
3409	30089,99336,7033594	1207103,8719278	3459	30694,57991,3217636	1211301,5023916
3410	30102,06440,5752871	1207189,2836241	3460	30706,69292,8241552	1211383,9416197
3411	30114,13629,8589112	1207274,6355654	3461	30718,80676,7657749	1211466,3217114
3412	30126,20904,4944766	1207359,9277643	3462	30730,92143,0874863	1211548,6426788
3413	30138,28264,4222409	1207445,1602336	3463	30743,03691,7301651	1211630,9045338
3414	30150,35709,5824745	1207530,3329658	3464	30755,15322,6346989	1211713,1072886
3415	30162,43239,9154603	1207615,4460337	3465	30767,27035,7419875	1211795,2509552
3416	30174,50855,3614947	1207700,4993897	3466	30779,38830,9929427	1211877,3355454
3417	30186,58555,8608837	1207785,4930666	3467	30791,50708,3284881	1211959,3610715
3418	30198,66341,3539523	1207870,4270770	3468	30803,62667,6895597	1212041,3275454
3419	30210,74211,7810273	1207955,3014333	3469	30815,74709,0171051	1212123,2349790
3420	30222,82167,0824606	1208040,1161482	3470	30827,86832,2520841	1212205,0833843
3421	30234,90207,1986088	1208124,8712343	3471	30839,99037,3354684	1212286,8727733
3422	30246,98332,0698432	1208209,5667041	3472	30852,11324,2082417	1212368,6031580
3423	30259,06541,6365473	1208294,2025702	3473	30864,23692,3113997	1212450,2745501
3424	30271,14835,8391175	1208378,7788449	3474	30876,36143,0859498	1212531,8869617
3425	30283,23214,6179624	1208463,2955410	3475	30888,48674,9729116	1212613,4404048
3426	30295,31677,9135035	1208547,7526709	3476	30900,61288,4133164	1212694,9348911
3427	30307,40225,6661744	1208632,1502470	3477	30912,73983,3482075	1212776,3704325
3428	30319,48857,8164214	1208716,4882818	3478	30924,86759,7186401	1212857,7470410
3429	30331,57574,3047032	1208800,7667879	3479	30936,99617,4656811	1212939,0647284
3430	30343,66375,0714911	1208884,9857776	3480	30949,12556,5304095	1213020,3235066
3431	30355,75260,0572687	1208969,1452634	3481	30961,25576,8539161	1213101,5233873
3432	30367,84229,2025321	1209053,2452576	3482	30973,38678,3773734	1213182,6643824
3433	30379,93282,4477897	1209137,2857729	3483	30985,51861,0416858	1213263,7465038
3434	30392,02419,7335626	1209221,2668215	3484	30997,65124,7881896	1213344,7697631
3435	30404,11641,0003841	1209305,1884157	3485	31009,78469,5579527	1213425,7341723
3436	30416,20946,1887998	1209389,0505681	3486	31021,91895,2921251	1213506,6397431
3437	30428,30335,2393679	1209472,8532909	3487	31034,05401,9318682	1213587,4864873
3438	30440,39808,0926588	1209556,5965965	3488	31046,18989,4183555	1213668,2744166
3439	30452,49364,6892553	1209640,2804973	3489	31058,32657,6927721	1213749,0035427
3440	30464,59004,9697526	1209723,9050056	3490	31070,46400,6963148	1213829,6738775
3441	30476,68728,8747582	1209807,4701336	3491	31082,60236,3701923	1213910,2854326
3442	30488,78536,3448918	1209890,9758938	3492	31094,74146,6556249	1213990,8382196
3443	30500,88427,3207856	1209974,4222984	3493	31106,88137,4938445	1214071,3322505
3444	30512,98401,7430840	1210057,8093596	3494	31119,02208,8267950	1214151,7675367
3445	30525,08459,5524436	1210141,1370897	3495	31131,16360,5930317	1214232,1440900
3446	30537,18600,6895333	1210224,4055011	3496	31143,30592,7377217	1214312,4619221
3447	30549,28825,0950344	1210307,6146059	3497	31155,44905,1996438	1214392,7210446
3448	30561,39132,7096403	1210390,7644163	3498	31167,59297,9206884	1214472,9214691
3449	30573,49523,4740566	1210473,8549447	3499	31179,73770,8421575	1214553,0632072
3450	30585,59997,3290013	1210556,8862031	3500	31191,88323,9753647	1214633,1462707

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
3501	31204,02957,0516354	1214713,1706711	3551	31812,35426,9251069	1218639,8483318
3502	31216,17670,2223065	1214793,1364199	3552	31824,54066,7734387	1218716,8960335
3503	31228,32463,3587264	1214873,0435288	3553	31836,72783,6694722	1218793,8856598
3504	31240,47336,4022552	1214952,8920093	3554	31848,91577,5551320	1218870,8172218
3505	31252,62289,2942645	1215032,6818731	3555	31861,10448,3723538	1218947,6907304
3506	31264,77321,9761376	1215112,4131315	3556	31873,29396,0630841	1219024,5061966
3507	31276,92434,3892691	1215192,0857963	3557	31885,48420,5692807	1219101,2636314
3508	31289,07625,4750654	1215271,6998788	3558	31897,67521,8329121	1219177,9630457
3509	31301,22898,1749442	1215351,2553907	3559	31909,86699,7959578	1219254,6044505
3510	31313,38249,4303349	1215430,7523433	3560	31922,05954,4004083	1219331,1878568
3511	31325,53680,1826782	1215510,1907483	3561	31934,25285,5882650	1219407,7132754
3512	31337,69190,3734265	1215589,5706171	3562	31946,44693,3715404	1219484,1807173
3513	31349,84779,9440436	1215668,8919611	3563	31958,64177,4822577	1219560,5901934
3514	31362,00448,8360047	1215748,1547918	3564	31970,83738,0724511	1219636,9417145
3515	31374,16196,9907964	1215827,3591206	3565	31983,03375,0141656	1219713,2352916
3516	31386,32024,3499171	1215906,5049590	3566	31995,23088,2494572	1219789,4709356
3517	31398,47930,8548761	1215985,5923185	3567	32007,42877,7203928	1219865,6486573
3518	31410,63916,4471946	1216064,6212104	3568	32019,62743,3690501	1219941,7684674
3519	31422,79981,0684250	1216143,5916160	3569	32031,82685,1375175	1220017,8303770
3520	31434,96124,6600510	1216222,5036369	3570	32044,02702,9678946	1220093,8343968
3521	31447,12347,1636879	1216301,3571943	3571	32056,22796,8022914	1220169,7805376
3522	31459,28648,5208821	1216380,1523296	3572	32068,42966,5828290	1220245,6688103
3523	31471,45028,6732118	1216458,8890543	3573	32080,63212,2516393	1220321,4992256
3524	31483,61487,5622661	1216537,5673796	3574	32092,83533,7508649	1220397,2717943
3525	31495,78025,1296456	1216616,1873168	3575	32105,03931,0226593	1220472,9865272
3526	31507,94641,3169624	1216694,7488774	3576	32117,24404,0091865	1220548,6434352
3527	31520,11336,0658398	1216773,2520724	3577	32129,44952,6526217	1220624,2425287
3528	31532,28109,3179122	1216851,6969134	3578	32141,65576,8951504	1220699,7838187
3529	31544,44961,0148256	1216930,0834115	3579	32153,86276,6789691	1220775,2673160
3530	31556,61891,0982371	1217008,4115781	3580	32166,07051,9462851	1220850,6930311
3531	31568,78899,5098153	1217086,6814244	3581	32178,27902,6393162	1220926,0609748
3532	31580,95986,1912397	1217164,8929617	3582	32190,48828,7002910	1221001,3711579
3533	31593,13151,0842014	1217243,0462011	3583	32202,69830,9071448	1221076,6235909
3534	31605,30394,1304025	1217321,1411540	3584	32214,90906,6950398	1221151,8182846
3535	31617,47715,2715565	1217399,1778315	3585	32227,12058,5133244	1221226,9552496
3536	31629,65114,4493879	1217477,1562448	3586	32239,33285,54685740	1221302,0344967
3537	31641,82591,6056327	1217555,0764052	3587	32251,54587,5030707	1221377,0560364
3538	31654,00146,6820379	1217632,9383238	3588	32263,75984,5591071	1221452,0198793
3539	31666,17779,6203617	1217710,7420118	3589	32275,97416,5789864	1221526,9260361
3540	31678,35490,3623735	1217788,4874803	3590	32288,18943,5050225	1221601,7745175
3541	31690,53278,8498538	1217866,1747406	3591	32300,40545,2795400	1221676,5653339
3542	31702,71145,0245944	1217943,8038036	3592	32312,62221,8448739	1221751,2984961
3543	31714,89088,8283980	1218021,3746808	3593	32324,83973,1433700	1221825,9740145
3544	31727,07110,2030788	1218098,8873829	3594	32337,05799,1173845	1221900,5918997
3545	31739,25209,0904517	1218176,3419212	3595	32349,27699,7092842	1221975,1521624
3546	31751,43385,4323829	1218253,7383069	3596	32361,49674,8614466	1222049,6548130
3547	31763,61639,1705898	1218331,0765509	3597	32373,71724,5162596	1222124,0998621
3548	31775,79970,2472406	1218408,3566643	3598	32385,93848,6161217	1222198,4873202
3549	31787,98378,6039049	1218485,5786582	3599	32398,16047,1034412	1222272,8171978
3550	31800,16864,1825632	1218562,7425437	3600	32410,38319,9206397	1222347,0895055

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
3601	32422,60667,0101452	1222421,3042536	3651	33034,71449,4236250	1226058,8821320
3602	32434,83088,3143988	1222495,4614528	3652	33046,97508,3057571	1226130,1750135
3603	32447,05583,7758516	1222569,5611135	3653	33059,23638,4807705	1226201,4108666
3604	32459,28153,3369651	1222643,6032460	3654	33071,40839,8916371	1226272,5897013
3605	32471,50796,9402111	1222717,5878610	3655	33083,76112,4813384	1226343,7115276
3606	32483,73514,5280722	1222791,5149689	3656	33096,02456,1928660	1226414,7763553
3607	32495,96306,0430411	1222865,3845799	3657	33108,28870,9692213	1226485,7841943
3608	32508,19171,4276210	1222939,1967047	3658	33120,55356,7534156	1226556,7350546
3609	32520,42110,6243257	1223012,9513535	3659	33132,81913,4884702	1226627,6289461
3610	32532,65123,5756792	1223086,6485368	3660	33145,08541,1174163	1226698,4658785
3611	32544,88210,2242160	1223160,2882650	3661	33157,35239,5832948	1226769,2458618
3612	32557,11370,5124811	1223233,8705485	3662	33169,62008,8291566	1226839,9689059
3613	32569,34604,3830296	1223307,3953975	3663	33181,88848,7980625	1226910,6350205
3614	32581,57911,7784271	1223380,8628226	3664	33194,15759,4330830	1226981,2442156
3615	32593,81292,6412497	1223454,2728339	3665	33206,42740,6772986	1227051,7965010
3616	32606,04746,9140836	1223527,6254419	3666	33218,69792,4737996	1227122,2918863
3617	32618,28274,5395255	1223600,9206569	3667	33230,96914,7656859	1227192,7303816
3618	32630,51875,4601824	1223674,1584891	3668	33243,24107,4960675	1227263,1119965
3619	32642,75549,6186715	1223747,3389490	3669	33255,51370,6080640	1227333,4367409
3620	32654,99296,9576205	1223820,4620467	3670	33267,78704,0448749	1227403,7046245
3621	32667,23117,4196672	1223893,5277926	3671	33280,06107,7494293	1227473,9156571
3622	32679,47010,99474598	1223966,5361969	3672	33292,33581,6650864	1227544,0698484
3623	32691,70977,4836566	1224039,4872699	3673	33304,61125,7349347	1227614,1672082
3624	32703,95016,9709265	1224112,3310218	3674	33316,88739,9021429	1227684,2077462
3625	32716,19129,3519483	1224185,2174630	3675	33329,16424,1098892	1227754,1914722
3626	32728,43314,5694113	1224257,9966035	3676	33341,44178,3013614	1227824,1183958
3627	32740,67572,5660148	1224330,7184537	3677	33353,72002,4197572	1227893,9885269
3628	32752,91903,2844685	1224403,3830237	3678	33365,99896,4082841	1227963,8018750
3629	32765,16306,6674922	1224475,9903237	3679	33378,27860,2101591	1228033,5584498
3630	32777,40782,6578159	1224548,5403640	3680	33390,55893,7686089	1228103,2582611
3631	32789,65331,1981800	1224621,0331547	3681	33402,83997,0268700	1228172,9013184
3632	32801,89952,2313347	1224693,4687052	3682	33415,12169,9281884	1228242,4876315
3633	32814,14645,7000406	1224765,8470279	3683	33427,40412,4158199	1228312,0172100
3634	32826,39411,5470685	1224838,1681307	3684	33439,68724,4330299	1228381,4900634
3635	32838,64249,7151992	1224910,4320244	3685	33451,97105,9230933	1228450,9062016
3636	32850,89160,1472237	1224982,6387195	3686	33464,25556,8292949	1228520,2656339
3637	32863,14142,7859432	1225054,7882257	3687	33476,54077,0949288	1228589,5683702
3638	32875,39197,5741689	1225126,8805532	3688	33488,82666,6632990	1228658,8144199
3639	32887,64324,4547221	1225198,9157122	3689	33501,11325,4777189	1228728,0037926
3640	32899,89523,3704344	1225270,8937127	3690	33513,40053,4815115	1228797,1364979
3641	32912,14794,2641471	1225342,8145648	3691	33525,68850,6180094	1228866,2125454
3642	32924,40137,0787119	1225414,6782786	3692	33537,97716,8305548	1228935,2319447
3643	32936,65551,7569904	1225486,4848640	3693	33550,26653,0624995	1229004,1947052
3644	32948,91038,2418545	1225558,2343312	3694	33562,55656,2572047	1229073,1008365
3645	32961,16596,4761857	1225629,9266902	3695	33574,84729,3580413	1229141,9503482
3646	32973,42226,4028759	1225701,5619510	3696	33587,13871,3083894	1229210,7432497
3647	32985,67927,9648269	1225773,1401236	3697	33599,43082,0516391	1229279,4795505
3648	32997,93701,1049505	1225844,6612180	3698	33611,72361,5311896	1229348,1592602
3649	33010,19545,7661685	1225916,1252443	3699	33624,01709,6904498	1229416,7823882
3650	33022,45461,8914128	1225987,5322122	3700	33636,31126,4728380	1229485,3489440

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
3701	33648,60611,8217820	1229553,8589371	3751	34264,21054,1251388	1232907,4473820
3702	33662,90155,6807191	1229622,3123769	3752	34276,53961,5725208	1232973,0849952
3703	33673,19787,9930960	1229690,7092729	3753	34288,86934,6575160	1233038,6665241
3704	33685,49478,7023689	1229759,0496344	3754	34301,19973,3240400	1233104,1919779
3705	33697,79237,7520033	1229827,3334710	3755	34313,53077,5160179	1233169,6613655
3706	33710,09065,0854743	1229895,5607920	3756	34325,86247,1773834	1233235,0746959
3707	33722,38960,6462663	1229963,7316069	3757	34338,19480,2520793	1233300,4319778
3708	33734,68924,3778732	1230031,8459250	3758	34350,52782,6840571	1233365,7332204
3709	33746,98956,2237982	1230099,9037557	3759	34362,86148,4172775	1233430,9784324
3710	33759,29056,1275539	1230167,9051085	3760	34375,19579,3957099	1233496,1676227
3711	33771,59224,7326624	1230235,8499925	3761	34387,53075,5633326	1233561,3008003
3712	33783,89459,8826549	1230303,7384174	3762	34399,86636,8641329	1233626,3779739
3713	33796,19763,6210723	1230371,5703922	3763	34412,20263,2421068	1233691,3991526
3714	33808,50135,1914645	1230439,3459265	3764	34424,53954,6412594	1233756,3643450
3715	33820,80574,5373910	1230507,0650295	3765	34436,87711,0056044	1233821,2735602
3716	33833,11081,6024205	1230574,7277106	3766	34449,21532,2791646	1233886,1268068
3717	33845,41655,3301311	1230642,3339789	3767	34461,55548,4059714	1233950,9240937
3718	33857,72298,6641100	1230709,8838440	3768	34473,89369,3300651	1234015,6654297
3719	33870,03008,5479540	1230777,3773150	3769	34486,23384,9954948	1234080,3508237
2720	33882,33785,9252690	1230844,8144012	3770	34498,57465,3463185	1234144,9802845
3721	33894,64630,7396701	1230912,1951118	3771	34510,91610,3266030	1234209,5538208
3722	33906,95542,9347820	1230979,5194562	3772	34523,25819,8804238	1234274,0714413
3723	33919,26522,4542382	1231046,7874436	3773	34535,60093,9518651	1234338,5331549
3724	33931,57559,2416819	1231113,9990832	3774	34547,94432,4850200	1234402,9389704
3725	33943,88683,2407651	1231181,1543843	3775	34560,28835,4239905	1234467,2888964
3726	33956,19864,3951494	1231248,2533560	3776	34572,63302,7128869	1234531,5829418
3727	33968,51112,6485054	1231315,2960077	3777	34584,97834,2958287	1234595,8211152
3728	33980,82427,9445131	1231382,2823483	3778	34597,32430,1169439	1234660,0032453
3729	33993,13810,2268614	1231449,2123873	3779	34609,67090,1203692	1234724,1298810
3730	34005,45259,4392487	1231516,0861337	3780	34622,01814,2502502	1234788,2004908
3731	34017,76775,5253824	1231582,9035957	3781	34634,36602,4507410	1234852,2152635
3732	34030,08358,4289791	1231649,6647855	3782	34646,71454,6660045	1234916,1742078
3733	34042,40078,0937646	1231716,3697092	3783	34659,06370,8402123	1234980,0773322
3734	34054,71724,4634738	1231783,0183770	3784	34671,41350,9175445	1235043,9246456
3735	34067,03507,4818507	1231849,5107980	3785	34683,76394,8421901	1235107,7161566
3736	34079,35357,0926487	1231916,1466912	3786	34696,11502,5583467	1235171,4518737
3737	34091,67273,2396299	1231982,6269360	3787	34708,46674,0102204	1235235,1318056
3738	34103,99255,8665659	1232049,0506712	3788	34720,81909,1420260	1235299,7559611
3739	34116,31304,9172371	1232115,4181961	3789	34733,17207,8979871	1235362,3243486
3740	34128,63420,3354333	1232181,7295197	3790	34745,52570,2223356	1235425,8369767
3741	34140,95602,0649530	1232247,9846511	3791	34757,87996,0593124	1235489,2938542
3742	34153,27850,0496041	1232314,1835993	3792	34770,23485,3531666	1235552,6949895
3743	34165,60164,2332034	1232380,3263735	3793	34782,59038,0481561	1235616,0403914
3744	34177,92544,5595769	1232446,4129825	3794	34794,94654,0885475	1235679,3300682
3745	34190,24990,9725594	1232512,4434355	3795	34807,30333,4186157	1235742,5640286
3746	34202,57503,4159949	1232578,4177416	3796	34819,66075,9826443	1235805,7422812
3747	34214,90081,8337365	1232644,3359097	3797	34832,01881,7249255	1235868,8648344
3748	34227,22726,1696462	1232710,1979487	3798	34844,37750,5897600	1235931,9316969
3749	34239,55436,3675949	1232776,0038679	3799	34856,73682,5214569	1235994,9428771
3750	34251,88212,3714628	1232841,7536760	3800	34869,09677,4643340	1236057,8983836

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
3801	34881,45735,3627176	1236120,7982248	3851	35500,27670,6274878	1239195,0024144
3802	34893,81856,1609424	1236183,6424093	3852	35512,66865,6299022	1239255,743932
3803	34906,18039,8033518	1236246,4309456	3853	35525,06120,7042954	1239315,7911366
3804	34918,54286,2342974	1236309,1638421	3854	35537,45435,7954320	1239375,0526525
3805	34930,90595,3981395	1236371,8411073	3855	35549,84810,8480845	1239434,9589489
3806	34943,26967,2392468	1236434,4627496	3856	35562,24245,877334	1239494,8100338
3807	34955,63401,7019965	1236497,0287776	3857	35574,53740,6170672	1239554,6059153
3808	34967,99898,7307741	1236559,5391996	3858	35587,03295,2229825	1239614,3466013
3809	34980,36458,2699737	1236621,9940241	3859	35599,42909,5695838	1239674,0320998
3810	34992,73080,2639978	1236684,3932596	3860	35611,82583,5016836	1239733,6624188
3811	35005,09764,6572574	1236746,7369143	3861	35624,22317,2641024	1239793,2375662
3812	35017,46511,3941716	1236809,0249968	3862	35636,62110,5016686	1239852,7575501
3813	35029,83320,4191684	1236871,2575153	3863	35649,01963,2592187	1239912,2223782
3814	35042,20191,6766837	1236933,4344784	3864	35661,41875,4815969	1239971,6320586
3815	35054,57125,1111621	1236995,5558244	3865	35673,81847,1136555	1240030,9865992
3816	35066,94120,6670565	1237057,6217716	3866	35686,21878,1002547	1240090,2860779
3817	35079,31178,2888281	1237119,6321185	3867	35698,61968,3862626	1240149,5302927
3818	35091,68297,9209466	1237181,5869433	3868	35711,02117,9165553	1240208,7194613
3819	35104,05479,5078899	1237243,4862545	3869	35723,42326,6360166	1240267,8535218
3820	35116,42722,9941444	1237305,3300602	3870	35735,82594,4895385	1240326,9324820
3821	35128,80028,3242046	1237367,1183689	3871	35748,22921,4220205	1240385,9563497
3822	35141,17395,4425735	1237428,8511889	3872	35760,63377,3783702	1240444,9251330
3823	35153,54824,2937624	1237490,5285285	3873	35773,03752,3035031	1240503,8388393
3824	35165,92314,8222909	1237552,1503959	3874	35785,44256,1423424	1240562,6974770
3825	35178,29866,9726868	1237613,7167995	3875	35797,84818,8398194	1240621,5010535
3826	35190,67480,6894863	1237675,2277476	3876	35810,25440,3408729	1240680,2495769
3827	35203,05155,9172339	1237736,6832484	3877	35822,66120,5904498	1240738,9430548
3828	35215,42892,6004823	1237798,0833100	3878	35835,06859,5335046	1240797,5814953
3829	35227,80690,6837923	1237859,4279409	3879	35847,47657,1149999	1240856,1649059
3830	35240,18550,1117332	1237920,7171493	3880	35859,88513,2799758	1240914,6932946
3831	35252,56470,8288825	1237981,9509434	3881	35872,29427,9732004	1240973,1666691
3832	35264,94452,7798259	1238043,1293313	3882	35884,70401,1398695	1241031,5850372
3833	35277,32495,9091572	1238104,2523214	3883	35897,11432,7249067	1241089,9484066
3834	35289,70500,1614786	1238165,3499218	3884	35909,52522,6733134	1241148,2567852
3835	35302,08765,4814004	1238226,3321407	3885	35921,93670,9300986	1241206,5101806
3836	35314,46991,8135411	1238287,2889664	3886	35934,34877,4402792	1241264,7086006
3837	35326,85279,1025275	1238348,1904669	3887	35946,76142,1488798	1241322,8520530
3838	35339,23627,2929944	1238409,0365904	3888	35959,17465,0009328	1241380,9405455
3839	35351,62036,3295848	1238469,8273652	3889	35971,58845,9414783	1241438,9740857
3840	35364,00506,1569500	1238530,5627993	3890	35984,00284,9155640	1241496,9526814
3841	35376,39036,7197493	1238591,2429009	3891	35996,41781,8682454	1241554,8763403
3842	35388,77627,9626502	1238651,8676782	3892	36008,83336,7445857	1241612,7450700
3843	35401,16279,8303284	1238712,4371393	3893	36021,24949,4896557	1241670,5588783
3844	35413,54992,2674677	1238772,9512921	3894	36033,66620,0485340	1241728,3177729
3845	35425,93765,2187598	1238833,4101449	3895	36046,08348,3663068	1241786,0217613
3846	35438,32598,6289047	1238893,8137059	3896	36058,50134,3880681	1241843,6708512
3847	35450,71492,4426106	1238954,1619830	3897	36070,91978,0589193	1241901,2650504
3848	35463,10446,6045936	1239014,4549843	3898	36083,33879,3239697	1241958,8043663
3849	35475,49461,0595779	1239074,6927180	3899	36095,75838,1283360	1242016,2888067
3850	35487,88535,7522959	1239134,3751919	3900	36108,17854,4171427	1242073,7183792

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
3901	36120,59928,1355219	1242131,0930913	3951	36742,35626,3818139	1244930,0474528
3902	36133,02059,2286132	1242188,4129508	3952	36754,80556,4292667	1244984,6341782
3903	36145,44247,6415640	1242245,6779651	3953	36767,25541,0634449	1245039,1664272
3904	36157,86493,3195291	1242302,8881418	3954	36779,70580,2298721	1245093,6442070
3905	36170,28796,2076709	1242350,0434886	3955	36792,15673,8740791	1245148,0675246
3906	36182,71156,2511595	1242417,1440130	3956	36804,60821,9416037	1245202,4363874
3907	36195,13573,3951725	1242474,1897225	3957	36817,06024,3779911	1245256,7508022
3908	36207,56047,5848250	1242531,1806248	3958	36829,51281,1287933	1245311,0107764
3909	36219,98778,7655199	1242588,1167273	3959	36841,96592,1395697	1245365,2163169
3910	36232,41166,8822472	1242644,9980376	3960	36854,41957,3558866	1245419,3674310
3911	36244,83811,8802848	1242701,8245632	3961	36866,87376,7233177	1245473,4641257
3912	36257,26513,7048480	1242758,5963116	3962	36879,32850,1874434	1245527,5064081
3913	36269,69272,3011596	1242815,3132903	3963	36891,78377,6938515	1245581,4942853
3914	36282,12087,6144499	1242871,9755069	3964	36904,23959,1881368	1245635,4277644
3915	36294,54959,5899565	1242928,5829688	3965	36916,69594,6159012	1245689,3068524
3916	36306,97888,1729256	1242985,1356835	3966	36929,15283,9227536	1245743,1315563
3917	36319,40873,3086091	1243041,6336584	3967	36941,61027,0543100	1245797,9018833
3918	36331,83914,9422675	1243098,0769011	3968	36954,06823,9561933	1245850,6178404
3919	36344,27013,0191686	1243154,4654190	3969	36966,52674,5740337	1245904,2794346
3920	36356,70167,4845876	1243210,7992194	3970	36978,98578,8534684	1245957,8866729
3921	36369,13378,2838070	1243267,0783100	3971	36991,44536,7401413	1246011,4395624
3922	36381,56645,3621170	1243323,3026981	3972	37003,90548,1797037	1246064,9381107
3923	36393,99968,6648151	1243379,4723911	3973	37016,36613,1178137	1246118,3823228
3924	36406,43348,1372062	1243435,5873964	3974	37028,82731,5001366	1246171,7722077
3925	36418,86783,7246026	1243491,6477215	3975	37041,28923,2723443	1246225,1077718
3926	36431,30275,3723241	1243547,6533737	3976	37053,75128,3801161	1246278,3890219
3927	36443,73823,0256978	1243603,6043604	3977	37066,21406,7691380	1246331,6159651
3928	36456,17426,6300581	1243659,5076890	3978	37078,67738,3851031	1246384,7886084
3929	36468,61086,1307471	1243715,3423669	3979	37091,14123,1737115	1246437,9069586
3930	36481,04801,4731140	1243771,1294013	3980	37103,60561,0806701	1246490,9710227
3931	36493,48572,6025153	1243826,8617998	3981	37116,07052,0516928	1246543,9808076
3932	36505,92399,4643152	1243882,5395696	3982	37128,53596,0325004	1246596,99363204
3933	36518,36282,0038848	1243938,1627181	3983	37141,00192,9688209	1246649,8375678
3934	36530,80220,1666029	1243993,7312526	3984	37153,46842,8063887	1246702,6845569
3935	36543,24213,8978555	1244049,2451803	3985	37165,93545,4909456	1246755,4772944
3936	36555,68263,1430358	1244104,7045087	3986	37178,40302,9682400	1246808,2157873
3937	36568,12367,8475445	1244160,1092450	3987	37190,87109,1840273	1246860,9005426
3938	36580,56527,9567895	1244215,4593964	3988	37203,33970,0840699	1246913,5306666
3939	36593,00743,4161859	1244270,7549705	3989	37215,80883,6141367	1246966,1058572
3940	36605,45014,1711564	1244325,9959742	3990	37228,27849,7200039	1247018,6274503
3941	36617,89340,1671306	1244381,1824150	3991	37240,74868,3474542	1247071,0948233
3942	36630,33721,3495456	1244437,3143001	3992	37253,21939,4422775	1247123,5079926
3943	36642,78157,6638457	1244491,3916367	3993	37265,69062,9502703	1247175,8669657
3944	36655,22649,0554824	1244546,4144322	3994	37278,16238,8172360	1247228,1717488
3945	36667,67195,4699146	1244601,3826936	3995	37290,63466,9889848	1247280,4223489
3946	36680,11796,8526082	1244656,2964283	3996	37303,10747,4113337	1247332,6187729
3947	36692,56453,1490365	1244711,1556434	3997	37315,58080,0301066	1247384,7610276
3948	36705,01164,3046799	1244765,9603463	3998	37328,05464,7911342	1247436,8491196
3949	36717,45930,2650262	1244820,7105440	3999	37340,52901,6402538	1247488,8830560
3950	36729,90750,9755702	1244875,4062437	4000	37353,00320,5233098	1247540,8628433

<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>	<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>
4001	37365,47931,3861531	1247592,7884883	4051	37989,90054,0228410	1250120,1865967
4002	37377,95524,1746414	1247644,6599980	4052	38002,40174,2094377	1250169,3597726
4003	37390,43168,8346394	1247696,4773789	4053	38014,90343,5692103	1250218,4791469
4004	37402,90865,3120183	1247748,2406377	4054	38027,40562,0483572	1250267,5447262
4005	37415,38613,5526560	1247799,9497815	4055	38039,90829,5930834	1250316,5565168
4006	37427,86413,5024375	1247851,6048166	4056	38052,41146,1496002	1250365,5145248
4007	37440,34265,1072542	1247903,2057500	4057	38064,91511,6641250	1250414,4187568
4008	37452,82168,3130042	1247954,7525883	4058	38077,41926,0828818	1250463,2692190
4009	37465,30113,0655925	1248006,2453383	4059	38089,92389,3521008	1250512,0659176
4010	37477,78129,3109308	1248057,6840065	4060	38102,42901,4180184	1250560,8088590
4011	37490,26186,9949373	1248109,0685998	4061	38114,93462,2268773	1250609,4980495
4012	37502,74296,0635371	1248160,3991246	4062	38127,44071,7249268	1250658,1334953
4013	37515,22456,4626617	1248211,6755880	4063	38139,94729,8584221	1250706,7152027
4014	37527,70668,1382497	1248262,8979963	4064	38152,45436,5736248	1250755,2431780
4015	37540,18931,0362460	1248314,0663562	4065	38164,96191,8168028	1250803,7174274
4016	37552,67245,1026022	1248365,1806745	4066	38177,46995,5342302	1250852,1379572
4017	37565,15610,2832767	1248416,2409578	4067	38189,97847,6721875	1250900,5047736
4018	37577,64026,5242345	1248467,2472125	4068	38202,48748,1769611	1250948,8178829
4019	37590,12493,7714470	1248518,1994456	4069	38214,99696,9948440	1250997,0772912
4020	37602,61011,9708926	1248569,0976634	4070	38227,50694,0721353	1251045,2830048
4021	37615,09581,0685560	1248619,9418727	4071	38240,01739,3551401	1251093,34350299
4022	37627,58201,0104287	1248670,7320800	4072	38252,52832,7901700	1251141,5333727
4023	37640,06871,7425087	1248721,4682919	4073	38265,03974,3235427	1251189,5780393
4024	37652,55593,2108006	1248772,1505150	4074	38277,55163,9015820	1251237,5690361
4025	37665,04365,3613156	1248822,7787558	4075	38290,06401,4706181	1251285,5063690
4026	37677,53188,1400714	1248873,3530210	4076	38302,57686,9769871	1251333,3900443
4027	37690,02061,4930924	1248923,8733171	4077	38315,09020,3670314	1251381,2200682
4028	37702,50985,3664095	1248974,3396506	4078	38327,60401,5870997	1251428,9964469
4029	37714,99959,7060601	1249024,7520281	4079	38340,11830,5835465	1251476,7191864
4030	37727,48984,4580882	1249075,1104561	4080	38352,63307,3027329	1251524,3882926
4031	37739,98059,5685443	1249125,4149412	4081	38365,14831,6910257	1251572,0037724
4032	37752,47184,9834855	1249175,6654897	4082	38377,66403,6947981	1251619,5656312
4033	37764,96360,6489752	1249225,8621084	4083	38390,18023,2604293	1251667,0738754
4034	37777,45586,5110836	1249276,0048035	4084	38402,69690,3343047	1251714,5285111
4035	37789,94862,5158871	1249326,0935819	4085	38415,21404,8628158	1251761,9295442
4036	37802,44188,6094690	1249376,1284497	4086	38427,73166,7923600	1251809,2769811
4037	37814,93564,7379187	1249426,1094134	4087	38440,24976,0693411	1251856,5708277
4038	37827,42930,8473321	1249476,0364798	4088	38452,76832,6471688	1251903,8110900
4039	37839,92466,8838119	1249525,9096551	4089	38465,28736,4512588	1251950,9977743
4040	37852,41992,7934670	1249575,7289457	4090	38477,80687,4490331	1251998,1308864
4041	37864,91568,5224127	1249625,4943582	4091	38490,32685,5799196	1252045,2104326
4042	37877,41194,0167709	1249675,2058989	4092	38502,84730,7903522	1252092,2364187
4043	37889,90869,2226698	1249724,8635745	4093	38515,36823,0267709	1252139,2088509
4044	37902,40594,0862443	1249774,4673911	4094	38527,88962,2356218	1252186,1277352
4045	37914,90368,5536354	1249824,0173552	4095	38540,41148,3633570	1252232,9930776
4046	37927,40192,5709906	1249873,5134733	4096	38552,93381,3564346	1252279,8048841
4047	37939,90066,0844640	1249922,9557518	4097	38565,45661,1613187	1252326,5631607
4048	37952,39989,0402158	1249972,3441969	4098	38577,97987,7244794	1252373,2679134
4049	37964,89961,3844127	1250021,6788153	4099	38590,50360,9923927	1252419,9191482
4050	37977,39983,0632280	1250070,9596131	4100	38603,02780,9115409	1252466,5168710

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
4101	38615,55247,4284119	1252513,0610880	4151	39242,36804,4818417	1254772,1815798
4102	38628,07760,4894999	1252559,5518049	4152	39254,91576,6634215	1254816,0047323
4103	38640,60320,0413048	1252605,9890278	4153	39267,46392,6681538	1254859,7746789
4104	38653,12926,0303326	1252652,3727626	4154	39280,01252,4428327	1254903,4914251
4105	38665,65578,4030952	1252698,7030153	4155	39292,56155,9342578	1254947,1549764
4106	38678,18277,1061105	1252744,9797918	4156	39305,11103,0892342	1254990,7653385
4107	38692,71022,0859023	1252791,2030979	4157	39317,66093,8545727	1255034,3225169
4108	38703,23813,2890002	1252837,3729398	4158	39330,21128,1770896	1255077,8265170
4109	38715,76503,6619400	1252883,4893232	4159	39342,76206,0036056	1255121,2773445
4110	38728,29534,1512632	1252929,5522540	4160	39355,31327,2809511	1255164,6750248
4111	38740,82463,7035172	1252975,5617382	4161	39367,86491,9559559	1255208,0195034
4112	38753,35439,2652554	1253021,5177816	4162	39380,41699,9754593	1255251,3108450
4113	38765,88460,7830370	1253067,4203901	4163	39392,96951,2863053	1255294,5490379
4114	38778,41528,2034271	1253113,2695696	4164	39405,52245,8353432	1255337,7340847
4115	38790,94641,4729967	1253159,0653261	4165	39418,07583,5694279	1255380,8659918
4116	38803,47803,5383228	1253204,8076651	4166	39430,62964,4354197	1255423,9447647
4117	38816,01005,3459879	1253250,4965927	4167	39443,18388,3801844	1255466,9704090
4118	38828,54255,8425806	1253296,1321147	4168	39455,73855,3505934	1255509,9429300
4119	38841,07551,9746953	1253341,7142370	4169	39468,29365,2935234	1255552,8623331
4120	38853,60893,6889323	1253387,2429653	4170	39480,84918,1558565	1255595,7286240
4121	38866,14280,9318977	1253432,7183055	4171	39493,40513,8844805	1255638,5418080
4122	38878,67713,6502032	1253478,1402634	4172	39505,96152,4262885	1255681,3018904
4123	38891,21191,7904666	1253523,5088448	4173	39518,51833,7281789	1255724,0085769
4124	38903,74715,2993114	1253568,8240554	4174	39531,75577,7370558	1255766,6627727
4125	38916,28284,1233668	1253614,0859012	4175	39543,63324,3998285	1255809,2635832
4126	38928,81898,2092680	1253659,2943877	4176	39556,19133,6634117	1255851,8113140
4127	38941,35557,5036557	1253704,4495210	4177	39568,74985,4747257	1255894,3059704
4128	38953,89261,9531767	1253749,5513065	4178	39581,30879,7806961	1255936,7475577
4129	38966,43011,5044832	1253794,5997503	4179	39593,86916,5282538	1255979,1360813
4130	38978,96806,1042335	1253839,5948579	4180	39606,42795,6643351	1256021,4715467
4131	38991,50645,6990914	1253884,5366352	4181	39618,98817,1358818	1256063,7539592
4132	39004,04530,2357266	1253929,4250878	4182	39631,54880,8898410	1256105,9833240
4133	39016,58459,6608144	1253974,2602216	4183	39644,10986,8731650	1256148,1596467
4134	39029,12433,9210360	1254019,0420422	4184	39656,67135,0328117	1256190,2829325
4135	39041,66452,9630782	1254063,7705552	4185	39669,23325,3157442	1256232,3531868
4136	39054,20516,7336334	1254108,4457666	4186	39681,79557,6689310	1256274,3704148
4137	39066,74625,1794000	1254153,2676818	4187	39694,35832,0393458	1256316,3346221
4138	39079,28778,2470818	1254197,6363067	4188	39706,92148,3739679	1256358,2456136
4139	39091,82975,8833885	1254242,1516469	4189	39719,48506,6197815	1256400,1039950
4140	39104,37218,0350354	1254286,6137080	4190	39732,04906,7237765	1256441,9091714
4141	39116,91504,6487435	1254331,0224958	4191	39744,61348,6329479	1256483,6613481
4142	39129,45835,6712393	1254375,3780159	4192	39757,17832,2942960	1256525,3605304
4143	39142,00211,0492552	1254419,5802739	4193	39769,74357,6548264	1256567,0067235
4144	39154,54630,7295291	1254463,9292755	4194	39782,30924,6615499	1256608,5999329
4145	39167,09094,6588046	1254508,1250254	4195	39794,87533,2614828	1256650,1421637
4146	39179,63602,7838310	1254552,2675320	4196	39807,44183,4016465	1256691,5274210
4147	39192,18155,7513630	1254596,3567982	4197	39820,00875,0290675	1256733,0617104
4148	39204,72751,4081612	1254640,3928305	4198	39832,57608,0907779	1256774,4430369
4149	39217,27391,8009917	1254684,3756344	4199	39845,14382,5338148	1256815,7714057
4150	39229,82076,1766261	1254728,3052156	4200	39857,71198,3052205	1256857,0468222

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
4201	39870,280553520427	1256898,2692914	4251	40499,22365,1077126	1258891,9982431
4202	39882,84953,6213341	1256939,4388188	4252	40511,81257,1059556	1258930,5271519
4203	39895,41893,0601529	1256980,5554093	4253	40524,40187,6331075	1258969,0033746
4204	39907,98873,5155622	1257021,6190683	4254	40536,99156,6364821	1259007,4269163
4205	39920,55895,2346305	1257062,6298009	4255	40549,58164,0633984	1259045,7977815
4206	39933,12957,8644314	1257103,5876122	4256	40562,17209,8611779	1259084,1159753
4207	39945,70061,4520436	1257144,4925076	4257	40574,76293,9771552	1259122,3815024
4208	39958,27205,9445512	1257185,53444921	4258	40587,35416,3586576	1259160,5943674
4209	39970,84391,2890433	1257226,1435709	4259	40599,94576,9530250	1259198,7545755
4210	39983,41617,4326142	1257266,8897491	4260	40612,53775,7076005	1259236,8621312
4211	39995,98884,3223633	1257307,5830319	4261	40625,13012,5697317	1259274,9170393
4212	40008,56191,9053952	1257348,2234244	4262	40637,72287,4867709	1259312,9193047
4213	40021,13540,1288196	1257388,8109318	4263	40650,31600,4050755	1259350,8659319
4214	40033,70928,9397513	1257429,3455592	4264	40662,90951,2750075	1259388,7659261
4215	40046,28358,2853105	1257469,3273115	4265	40675,50340,0409336	1259426,6172916
4216	40058,85828,1126220	1257510,2561941	4266	40688,09766,6512252	1259464,4020334
4217	40071,43338,3688161	1257550,6322121	4267	40700,69231,0532586	1259502,1411562
4218	40084,00889,0010282	1257590,9553703	4268	40713,28733,1944143	1259539,8276647
4219	40096,58479,9563985	1257631,2256741	4269	40725,88273,0220795	1259577,4615636
4220	40109,16111,1820726	1257671,4431283	4270	40738,47850,4836431	1259615,0428576
4221	40121,73782,6252009	1257711,6077383	4271	40751,07465,5265007	1259652,5715516
4222	40134,31494,2329392	1257751,7195088	4272	40763,67118,0980523	1259690,0476501
4223	40146,89245,9524480	1257791,7784451	4273	40776,26808,1457724	1259727,4711578
4224	40159,47037,7308931	1257831,7845523	4274	40788,86535,6168602	1259764,8420795
4225	40172,04869,5154454	1257871,7378351	4275	40801,46300,4589397	1259802,1604198
4226	40184,62741,2532805	1257911,6382988	4276	40814,06102,6193595	1259839,4261833
4227	40197,20652,8915793	1257951,4859485	4277	40826,65942,0455428	1259876,6393748
4228	40209,78604,3775278	1257991,2807891	4278	40839,25818,6849176	1259913,7999989
4229	40222,36595,6583169	1258031,0228254	4279	40851,85732,4849165	1259950,9080604
4230	40234,94626,6811423	1258070,7120628	4280	40864,45683,3929769	1259987,9635636
4231	40247,52697,3932051	1258110,3485061	4281	40877,05671,3565405	1260024,9665135
4232	40260,10807,7417112	1258149,9321602	4282	40889,65696,3230540	1260061,9169145
4233	40272,68957,6738714	1258189,4630303	4283	40902,25758,2399565	1260098,8147713
4234	40285,27147,1369017	1258228,9411212	4284	40914,85857,0547399	1260135,6600885
4235	40297,85376,0780229	1258268,3664378	4285	40927,45992,7148284	1260172,4528708
4236	40310,43644,4444607	1258307,7389854	4286	40940,06165,1676992	1260209,1931225
4237	40323,01952,1834461	1258347,0587686	4287	40952,66374,3608218	1260245,8808483
4238	40335,60299,2422147	1258386,3257926	4288	40965,26620,2416706	1260282,5160536
4239	40348,18685,55680073	1258425,5400621	4289	40977,86902,7577242	1260319,0987419
4240	40360,77111,1080694	1258464,7015822	4290	40990,47221,8564661	1260355,6289181
4241	40373,35575,8096516	1258503,8103577	4291	41003,07577,4853842	1260392,1065869
4242	40385,94079,6200093	1258542,8663938	4292	41015,67969,5919711	1260428,5317527
4243	40398,52622,4864031	1258581,8696950	4293	41028,28398,1237238	1260464,9044202
4244	40411,11204,3560981	1258620,8202665	4294	41040,88863,0281440	1260501,2245938
4245	40423,69825,1763646	1258659,7181131	4295	41053,49364,2527378	1260537,4922782
4246	40436,28484,8944777	1258698,5632397	4296	41066,09901,7450159	1260573,7074778
4247	40448,87183,4577174	1258737,3556512	4297	41078,70475,4524937	1260609,8701971
4248	40461,45920,8133686	1258776,0953523	4298	41091,31085,3226908	1260645,9804408
4249	40474,04696,9087209	1258814,7823482	4299	41103,91731,3031316	1260682,0382133
4250	40486,63511,6910691	1258853,4166435	4300	41116,52413,3413449	1260718,0435190

<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>	<i>Verf. Sine.</i>	<i>Segment.</i>	<i>Difference.</i>
4301	41129,13131,3848639	1260753,9963625	4351	41759,93782,1075867	1262484,8465067
4302	41141,73885,3812264	1260789,8967484	4352	41772,56266,9540934	1262518,1295735
4303	41154,34675,2779748	1260825,7446809	4353	41785,18785,0836669	1262551,3604022
4304	41166,95501,0226557	1260861,5401648	4354	41797,81336,4440691	1262584,5389970
4305	41179,56362,5628205	1260897,2832043	4355	41810,43920,9830661	1262617,6653618
4306	41192,17259,8460248	1260932,9738040	4356	41823,06538,6484279	1262650,7395009
4307	41204,78192,8198288	1260968,6119682	4357	41835,69189,3879288	1262683,7614182
4308	41217,39161,4317970	1261004,1977016	4358	41848,31873,1493470	1262716,7311180
4309	41230,00165,6294986	1261039,7310085	4359	41860,94589,8804650	1262749,6486044
4310	41242,61205,3605071	1261075,2118932	4360	41873,57339,5290694	1262782,5138814
4311	41255,22280,5724003	1261110,6403604	4361	41886,20122,0429508	1262815,3269529
4312	41267,83391,2127607	1261146,0164143	4362	41898,82937,3699037	1262848,0878233
4313	41280,44537,2291750	1261181,3400594	4363	41911,45785,4577270	1262880,7964964
4314	41293,05718,5692344	1261216,6113001	4364	41924,08666,2542234	1262913,4529765
4315	41305,66935,1805345	1261251,8301408	4365	41936,71579,7071999	1262946,0572674
4316	41318,28187,0106753	1261286,9965858	4366	41949,34525,7644673	1262978,6093734
4317	41330,89474,0072611	1261322,1106396	4367	41961,97504,3738407	1263011,1092982
4318	41343,50796,1179006	1261357,1723065	4368	41974,60515,4831389	1263043,5570461
4319	41356,12153,2902072	1261392,1815909	4369	41987,23559,0401850	1263075,9526210
4320	41368,73545,4717981	1261427,1384972	4370	41999,86634,9928060	1263108,2960271
4321	41381,34972,6102953	1261462,0430297	4371	42012,49743,2888331	1263140,5872681
4322	41393,96434,6533250	1261496,8951928	4372	42025,12883,8761012	1263172,8263482
4323	41406,57931,5485178	1261531,6949907	4373	42037,76056,7024494	1263205,0132714
4324	41419,19463,2435085	1261566,4424280	4374	42050,39261,7157208	1263237,1480416
4325	41431,81029,6859365	1261601,1375087	4375	42063,02498,8637524	1263269,2306628
4326	41444,42637,8234452	1261635,7802374	4376	42075,65768,0944252	1263301,2611390
4327	41457,04266,6036826	1261670,3706182	4377	42088,29069,3555642	1263333,2394743
4328	41469,65936,9743008	1261704,9086555	4378	42100,92402,5950385	1263365,1656724
4329	41482,27641,8829563	1261739,3943537	4379	42113,55767,7607109	1263397,0397373
4330	41494,89381,2773100	1261773,8277169	4380	42126,19164,8004482	1263428,8616731
4331	41507,51155,1050269	1261808,2087495	4381	42138,82593,6621213	1263460,6314837
4332	41520,12963,3137764	1261842,5374558	4382	42151,46054,2936050	1263492,3491730
4333	41532,74805,8512322	1261876,8138400	4383	42164,09546,6427780	1263524,0147448
4334	41545,36682,6650722	1261911,0379063	4384	42176,73070,6575228	1263555,6282032
4335	41557,98593,7029785	1261945,2096591	4385	42189,36626,2857260	1263587,1895520
4336	41570,67538,9126376	1261979,3291027	4386	42202,00213,4752780	1263618,6987952
4337	41583,22518,2417403	1262013,3962411	4387	42214,63832,1740733	1263650,1559366
4338	41595,84531,6379813	1262047,4110787	4388	42227,27482,3300099	1263681,5609803
4339	41608,46579,0490600	1262081,3736197	4389	42239,91163,8909902	1263712,9139298
4340	41621,08660,4226797	1262115,2838683	4390	42252,54876,8049200	1263744,2147893
4341	41633,70775,7065480	1262149,1418288	4391	42265,18621,0197093	1263775,4635626
4342	41646,32924,8483768	1262182,9475052	4392	42277,82396,4832719	1263806,6602535
4343	41658,95107,7958820	1262216,7009020	4393	42290,46203,1435254	1263837,8048659
4344	41671,57324,4967840	1262250,4020233	4394	42303,10040,9483913	1263868,8974035
4345	41684,19574,8988073	1262284,0508730	4395	42315,73909,8457948	1263899,9378705
4346	41696,81858,9496803	1262317,6474556	4396	42328,37809,7836653	1263930,9262705
4347	41709,44176,5971359	1262351,1917752	4397	42341,01740,7099358	1263961,8626072
4348	41722,06527,7889112	1262384,6838360	4398	42353,65702,5725430	1263992,7468846
4349	41734,68912,4727472	1262418,1236420	4399	42366,29695,3194276	1264023,5791066
4350	41747,31330,5963892	1262451,5111975	4400	42378,93718,8985342	1264054,3592768

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
4401	42391,57773,2578110	1264085,0873992	4451	43023,98586,6900210	1265555,2144827
4402	42404,21858,3452102	1264115,7634573	4452	43036,64141,9045107	1265583,2930524
4403	42416,85974,1086875	1264146,3875153	4453	43049,29725,1975631	1265611,3197556
4404	42429,50120,4962028	1264176,9595167	4454	43061,95336,5173187	1265639,2946028
4405	42442,14297,4557195	1264207,4794853	4455	43074,50975,8119215	1265667,2175973
4406	42454,78504,9352048	1264237,9474249	4456	43087,26643,0295188	1265695,7887427
4407	42467,42742,8826297	1264268,3633393	4457	43099,92338,1182615	1265722,9080423
4408	42480,07011,2459620	1264298,7272322	4458	43112,58061,0263038	1265750,6754996
4409	42492,71309,9732012	1264329,0391074	4459	43125,23811,7018034	1265778,3911180
4410	42505,35639,0123086	1264359,2989686	4460	43137,89590,0929214	1265806,0549008
4411	42517,99998,3112772	1264389,5068196	4461	43150,55396,1478222	1265833,6668515
4412	42530,64387,8180908	1264419,6626640	4462	43163,21229,8146738	1265861,2269735
4413	42543,28807,4807608	1264449,7665056	4463	43175,87091,0416473	1265888,7352702
4414	42555,93257,2472664	1264479,8183482	4464	43188,52979,7769175	1265916,1917449
4415	42568,57737,0656146	1264509,8181953	4465	43201,18895,9686624	1265943,5964010
4416	42581,22246,3838099	1264539,7660508	4466	43213,84839,5650634	1265970,9492419
4417	42593,86786,6498608	1264569,6619183	4467	43226,50810,5143053	1265998,2502709
4418	42606,51356,3117791	1264599,5058015	4468	43239,16808,7645762	1266025,4994913
4419	42619,15955,8175806	1264629,2977041	4469	43251,82834,2640675	1266052,6969067
4420	42631,80585,1152847	1264659,0376297	4470	43264,48886,9609742	1266079,8425202
4421	42644,45244,1529144	1264688,7255821	4471	43277,14966,8034944	1266106,9363352
4422	42657,09932,8784965	1264718,3615648	4472	43289,81073,7398296	1266133,9783550
4423	42669,74651,2400613	1264747,9455816	4473	43302,47207,7181846	1266160,9685829
4424	42682,39399,1856429	1264777,4776360	4474	43315,13368,6867675	1266187,9070224
4425	42695,04176,6632789	1264806,9577318	4475	43327,79556,5937899	1266214,7936765
4426	42707,68983,6210107	1264836,3858726	4476	43340,45771,3874664	1266241,6285488
4427	42720,33820,0068833	1264865,7620618	4477	43353,12013,0160152	1266268,4116423
4428	42732,98685,7689451	1264895,0863033	4478	43365,78281,4276575	1266295,1429606
4429	42745,63580,8552484	1264924,3586007	4479	43378,44576,5706181	1266321,8225067
4430	42758,28505,2138491	1264953,5789574	4480	43391,10898,3931248	1266348,4502840
4431	42770,93458,7928065	1264982,7473771	4481	43403,77246,8434088	1266375,0262958
4432	42783,58441,5401836	1265011,8638636	4482	43416,43621,8697046	1266401,5505453
4433	42796,23453,4040472	1265040,9284201	4483	43429,10023,4202499	1266428,0230358
4434	42808,88494,3324673	1265069,9410504	4484	43441,76451,4432857	1266454,4437704
4435	42821,53564,2735177	1265098,9017581	4485	43454,42905,8870561	1266480,8127525
4436	42834,18663,1752758	1265127,8105467	4486	43467,09386,6998086	1266507,1299853
4437	42846,83790,9858225	1265156,6674198	4487	43479,75893,8297940	1266533,3954720
4438	42859,48947,6532423	1265185,4723809	4488	43492,42427,2252660	1266559,6092159
4439	42872,14133,1256232	1265214,2254336	4489	43505,08986,8344819	1266585,7712201
4440	42884,79347,3510568	1265242,9265813	4490	43517,75572,6057020	1266611,8814878
4441	42897,44590,2776381	1265271,5758278	4491	43530,42184,4871898	1266637,9400222
4442	42910,09861,8534659	1265300,1731764	4492	43543,08822,4272120	1266663,2468267
4443	42922,75162,0266423	1265328,7186307	4493	43555,75486,3740387	1266689,9019042
4444	42935,40490,7452730	1265357,2121941	4494	43568,42176,2759429	1266715,8052580
4445	42948,05847,9574671	1265385,6538703	4495	43581,08892,0812009	1266741,6568913
4446	42960,71233,6113374	1265414,0436627	4496	43593,75633,7380922	1266767,4568073
4447	42973,36647,6550001	1265442,3815748	4497	43606,42401,1848995	1266793,2050091
4448	42986,02090,0365749	1265470,6676101	4498	43619,09194,3999086	1266818,9014998
4449	42998,67560,7041850	1265498,9017720	4499	43631,76013,3014084	1266844,5462826
4450	43011,33059,6059570	1265527,0840640	4500	43644,42857,8476910	1266870,1393607

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
4501	43657,09727,9870517	1266895,6807371	4551	44290,84724,3532456	1268106,8973198
4502	43669,76623,6677888	1266921,1704151	4552	44303,52831,2505654	1268129,8059148
4503	43682,43544,8382039	1266946,6083976	4553	44316,20961,0564802	1268152,6629623
4504	43695,10491,4466015	1266971,9946880	4554	44328,89113,7194425	1268175,4684547
4505	43707,77463,4412895	1266997,3292891	4555	44341,57282,1879072	1268198,2224251
4506	43720,44460,7705786	1267022,6122042	4556	44354,25487,4103323	1268220,9248461
4507	43733,11483,3827828	1267047,8434364	4557	44366,93708,3351784	1268243,5757305
4508	43745,78531,2262192	1267073,0229887	4558	44379,61951,9109089	1268266,1750810
4509	43758,45504,2492079	1267098,1508641	4559	44392,30218,0859899	1268288,7229005
4510	43771,12702,4000720	1267123,2270659	4560	44404,98506,8088904	1268311,2191917
4511	43783,79825,6271379	1267148,2515970	4561	44417,66818,0280821	1268333,6639572
4512	43796,46973,8787349	1267173,2244605	4562	44430,35151,6920393	1268356,0571999
4513	43809,14147,1031954	1267198,1456596	4563	44443,03507,7492392	1268378,3989225
4514	43821,81345,2488550	1267223,0151971	4564	44455,71886,1481617	1268400,6891277
4515	43834,48568,2640521	1267247,8330761	4565	44468,40286,8372894	1268422,9278182
4516	43847,15816,0971282	1267272,5992998	4566	44481,08709,7651076	1268445,1149966
4517	43859,83088,6964280	1267297,3138711	4567	44493,77154,8801042	1268467,2506659
4518	43872,50386,0102991	1267321,9767929	4568	44506,45622,1307701	1268489,3348286
4519	43885,17707,9870920	1267346,5880686	4569	44519,14111,4655987	1268511,32674874
4520	43897,85054,5751606	1267371,1477008	4570	44531,82622,8330861	1268533,3486449
4521	43910,52425,7228615	1267395,6556927	4571	44544,51156,1817310	1268555,2783039
4522	43923,19821,3785542	1267420,1120473	4572	44557,19711,4600349	1268577,1564672
4523	43935,87241,4906015	1267444,5167676	4573	44569,88288,6165021	1268598,9831371
4524	43948,54686,0073691	1267468,8698564	4574	44582,56887,5996392	1268620,7583166
4525	43961,22154,8772255	1267493,1713169	4575	44595,25508,3579558	1268642,4820082
4526	43973,89648,0485424	1267517,4211520	4576	44607,94150,8399640	1268664,1542145
4527	43986,57165,4696244	1267541,6193646	4577	44620,62814,9941785	1268685,7749383
4528	43999,24707,0890590	1267565,7659576	4578	44633,31500,7691168	1268707,3441820
4529	44011,92272,8550166	1267589,8609343	4579	44646,00208,1132988	1268728,8619485
4530	44024,59862,7159509	1267613,39042972	4580	44658,68936,9752473	1268750,3282402
4531	44037,27476,6202481	1267637,8960494	4581	44671,37687,3034875	1268771,7430598
4532	44049,95114,5162975	1267661,8361940	4582	44684,06459,0465473	1268793,1064099
4533	44062,62776,3524915	1267685,7247338	4583	44696,75252,1529572	1268814,4182931
4534	44075,30462,0772253	1267709,5616716	4584	44709,44066,5712503	1268835,6787120
4535	44087,98171,6388969	1267733,3470104	4585	44722,12902,2499623	1268856,8876691
4536	44100,65904,9859073	1267757,0807532	4586	44734,81759,1376314	1268878,0451672
4537	44113,33662,0666605	1267780,7629028	4587	44747,50637,1827986	1268899,1512086
4538	44126,01442,8295633	1267804,3934620	4588	44760,19536,3340072	1268920,2057960
4539	44138,69247,2230253	1267827,9724339	4589	44772,88455,5398032	1268941,2089321
4540	44151,37075,1954593	1267851,4998213	4590	44785,57397,7487353	1268962,1606192
4541	44164,04926,6952806	1267874,9756269	4591	44798,26359,9093545	1268983,0608600
4542	44176,72801,6709075	1267898,3998539	4592	44810,95342,9702145	1269003,9096569
4543	44189,40700,0707614	1267921,7725048	4593	44823,64346,8798714	1269024,7070128
4544	44202,08621,8432662	1267945,0935827	4594	44836,33371,5868842	1269045,4529297
4545	44214,76566,9368489	1267968,3630903	4595	44849,02417,0398139	1269066,1474105
4546	44227,44535,2999392	1267991,5810306	4596	44861,71483,1872244	1269086,7904576
4547	44240,12526,8809698	1268014,7474063	4597	44874,40569,9776820	1269107,3820736
4548	44252,80541,6283761	1268037,8622202	4598	44887,09677,3597556	1269127,9222608
4549	44265,48579,4905963	1268060,9254752	4599	44899,78805,2820164	1269148,4110219
4550	44278,16640,4160715	1268083,9371741	4600	44912,47953,6930383	1269168,8483592

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
4601	44925,17122,5413975	1269189,2342754	4651	45560,00486,8100299	1270143,0210738
4602	44937,86311,7750729	1269209,5687729	4652	45572,70629,8311037	1270160,7876528
4603	44950,55521,3444458	1269229,8518540	4653	45585,40790,6187565	1270178,5029309
4604	44963,24751,1962998	1269250,0835214	4654	45598,10969,1216875	1270196,1669103
4605	44975,94001,2798213	1269270,2637775	4655	45610,81165,2885978	1270213,7795933
4606	44988,63271,5435988	1269290,3926247	4656	45623,51379,0681911	1270231,3409818
4607	45001,32561,9362234	1269310,4700655	4657	45636,21610,4091729	1270248,8510780
4608	45014,01872,4062889	1269330,4961021	4658	45648,91859,2602509	1270266,3098841
4609	45026,71202,9023910	1269350,4707374	4659	45661,62125,5701350	1270283,7174021
4610	45039,40553,3731284	1269370,3939734	4660	45674,32409,2875371	1270301,0736342
4611	45052,09923,7671018	1269390,2658127	4661	45687,02710,3611713	1270318,3785824
4612	45064,79314,0329145	1269410,0862577	4662	45699,73028,7397537	1270335,6322490
4613	45077,48724,1191722	1269429,8553109	4663	45712,43364,3720027	1270352,8346358
4614	45090,18153,9744831	1269449,5729745	4664	45725,13717,2066385	1270369,9857451
4615	45102,87603,5474577	1269469,2392510	4665	45737,84087,1923836	1270387,0855790
4616	45115,57072,7867087	1269488,8541429	4666	45750,54474,2779626	1270404,1341393
4617	45128,26561,6408516	1269508,4176524	4667	45763,24878,4121019	1270421,1314284
4618	45140,96070,0585040	1269527,9297819	4668	45775,95299,5435303	1270438,0774482
4619	45153,65597,9882859	1269547,3905339	4669	45788,65737,6209785	1270454,9722006
4620	45166,35145,3788198	1269566,7999106	4670	45801,36192,5931791	1270471,8156880
4621	45179,04712,1787304	1269586,1579145	4671	45814,06664,4088671	1270488,6079121
4622	45191,74298,3366449	1269605,4645478	4672	45826,77153,0167792	1270505,3458752
4623	45204,43903,8011927	1269624,7198130	4673	45839,47658,3656544	1270522,0385791
4624	45217,13528,5210057	1269643,9237123	4674	45852,18180,4042335	1270538,6770259
4625	45229,83172,4447181	1269663,0762482	4675	45864,88719,0812594	1270555,2642177
4626	45242,52835,5209663	1269682,1774228	4676	45877,59274,3454771	1270571,8001564
4627	45255,22517,6983891	1269701,2272386	4677	45890,29846,1456335	1270588,2848441
4628	45267,92218,9256277	1269720,2256978	4678	45903,00434,4304776	1270604,7182828
4629	45280,61939,1513256	1269739,1728028	4679	45915,71039,1487604	1270621,1004742
4630	45293,31678,3241284	1269758,0685559	4680	45928,41660,2492346	1270637,4314207
4631	45306,01436,3926843	1269776,9129593	4681	45941,12297,6806552	1270653,37111240
4632	45318,71213,3056437	1269795,7060153	4682	45953,82951,3917792	1270669,39395861
4633	45331,41009,0116590	1269814,4477262	4683	45966,53621,3313654	1270686,1168091
4634	45344,10823,4593852	1269833,1380944	4684	45979,24307,4481745	1270702,2427949
4635	45356,80656,5974796	1269851,7771219	4685	45991,95009,6909694	1270718,3175454
4636	45369,50508,3746015	1269870,3648112	4686	46004,65728,0085148	1270734,3410625
4637	45382,20378,7394128	1269888,9011645	4687	46017,36462,3495773	1270750,3133483
4638	45394,90267,6405773	1269907,3861839	4688	46030,07212,6629256	1270766,2344046
4639	45407,60175,0267612	1269925,8198719	4689	46042,77978,8973302	1270782,1042333
4640	45420,30100,8466331	1269944,2022305	4690	46055,48761,0015635	1270797,9228365
4641	45433,00045,0488636	1269962,5332620	4691	46068,19558,9244000	1270813,6902159
4642	45445,70007,5821256	1269980,8129687	4692	46080,90372,6146159	1270829,4063736
4643	45458,39988,3950943	1269999,0413527	4693	46093,61202,0209895	1270845,0713113
4644	45471,09987,4364470	1270017,2184164	4694	46106,32047,0923008	1270860,6850311
4645	45483,80004,6548634	1270035,3441617	4695	46119,02907,7773319	1270876,2475346
4646	45496,50039,9990251	1270053,4185911	4696	46131,73784,0248665	1270891,7588241
4647	45509,20093,4176161	1270071,14417066	4697	46144,44675,7836906	1270907,2189011
4648	45521,90164,8593227	1270089,4135105	4698	46157,15583,0025917	1270922,6277676
4649	45534,60254,2728332	1270107,3340048	4699	46169,86505,6303594	1270937,9854255
4650	45547,30361,6068380	1270125,2031919	4700	46182,57443,6157849	1270953,2918767

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
4701	46195,28396,9076616	1270968,5471229	4751	46830,94446,0808242	1271666,0622114
4702	46207,99365,4547845	1270983,7511661	4752	46843,66112,1403056	1271678,7083131
4703	46220,70349,2059506	1270998,9040080	4753	46856,37790,8513487	1271691,3032974
4704	46233,41348,1099586	1271014,0056504	4754	46869,09482,1545461	1271703,8471660
4705	46245,12362,1156090	1271029,0560954	4755	46881,81185,0018121	1271716,3399202
4706	46258,83391,1717044	1271044,0553446	4756	46894,52902,3417323	1271728,7815616
4707	46271,54435,2270490	1271059,0033997	4757	46907,24631,1232939	1271741,1720918
4708	46284,25494,2304487	1271073,9002628	4758	46919,96372,2953857	1271753,5115120
4709	46296,96568,1307115	1271088,7459355	4759	46932,68125,8068977	1271765,7998241
4710	46309,67656,8766470	1271103,5404196	4760	46945,39891,6067218	1271778,0370292
4711	46322,38760,4170666	1271118,2837170	4761	46958,11669,6437510	1271790,2231290
4712	46335,09878,7007837	1271132,9758294	4762	46970,83459,8668799	1271802,3581248
4713	46347,81011,6766131	1271147,6167586	4763	46983,55262,2250048	1271814,4420182
4714	46360,52159,2933717	1271162,2065064	4764	46996,27076,6670230	1271826,4748108
4715	46373,23321,4998781	1271176,7450745	4765	47008,98903,1418338	1271838,4565037
4716	46385,94498,2449526	1271191,2324646	4766	47021,70741,5983375	1271850,3870985
4717	46398,65689,4774172	1271205,6686786	4767	47034,42591,9854360	1271862,2665967
4718	46411,36895,1460958	1271220,0537181	4768	47047,14454,2520328	1271874,0949997
4719	46424,08115,1998139	1271234,3875850	4769	47059,86328,3470325	1271885,8723089
4720	46436,79349,5873989	1271248,6702809	4770	47072,58214,2193414	1271897,5985258
4721	46449,50598,2576798	1271262,9018076	4771	47085,30111,8178672	1271909,2736517
4722	46462,21861,1594874	1271277,0821667	4772	47098,02021,0915189	1271920,8976880
4723	46474,93138,2416541	1271291,2113600	4773	47110,73941,9892069	1271932,4706362
4724	46487,64429,4530141	1271305,2893893	4774	47123,45874,4598431	1271943,9924976
4725	46500,35734,7424034	1271319,3162561	4775	47136,17818,4523407	1271955,4632737
4726	46513,07054,0586595	1271333,2919622	4776	47148,89773,9156143	1271966,8829658
4727	46525,78387,3506217	1271347,2165094	4777	47161,61740,7985801	1271978,2515752
4728	46538,49734,5671311	1271361,0898991	4778	47174,33719,0501553	1271989,5691035
4729	46551,21095,6570302	1271374,9121333	4779	47187,05708,6192588	1272000,8355518
4730	46563,92470,5691635	1271388,6832133	4780	47199,77709,4548106	1272012,0509217
4731	46576,63859,2523768	1271402,4031412	4781	47212,49721,5057323	1272023,2152143
4732	46589,35261,6555180	1271416,0719182	4782	47225,21744,7209466	1272034,3284312
4733	46602,06677,274362	1271429,6895463	4783	47237,93779,0493778	1272045,3905736
4734	46614,78107,4169825	1271443,2560270	4784	47250,65824,4399514	1272056,4016428
4735	46627,49550,6730095	1271456,7713620	4785	47263,37880,8415942	1272067,3616402
4736	46640,21007,4443715	1271470,2355528	4786	47276,09948,2032344	1272078,2705671
4737	46652,92477,6799243	1271483,6486011	4787	47288,82026,4738015	1272089,1284248
4738	46665,63961,3285254	1271497,0105086	4788	47301,54115,6022263	1272099,9352146
4739	46678,35458,3390340	1271511,3212768	4789	47314,26215,5374409	1272110,6909379
4740	46691,06958,6603108	1271523,5809074	4790	47326,98326,2283788	1272121,3955958
4741	46703,78492,2412182	1271536,7894018	4791	47339,70447,6239746	1272132,0491898
4742	46716,50029,0306200	1271549,9467619	4792	47352,42579,6731644	1272142,6517210
4743	46729,21578,9773819	1271563,0529891	4793	47365,14722,3248854	1272153,2031909
4744	46741,93142,0303710	1271576,1080849	4794	47377,86875,5280763	1272163,7036005
4745	46754,64718,1384559	1271589,1120511	4795	47390,59039,2316768	1272174,1529512
4746	46767,36307,2505070	1271602,0648891	4796	47403,31213,3846280	1272184,5512443
4747	46780,07909,3153961	1271614,9666005	4797	47416,03397,9358723	1272194,8984811
4748	46792,79524,2819967	1271627,8171869	4798	47428,75592,8343534	1272205,1946626
4749	46805,51152,0991836	1271640,6166498	4799	47441,47798,0290160	1272215,4397903
4750	46818,22792,7158334	1271653,3649908	4800	47454,20013,4688063	1272225,6338653

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
4801	47466,92239,1026716	1272235,7768888	4851	48103,15390,3190964	1272677,8627849
4802	47479,64474,8795604	1272245,8688621	4852	48115,88068,1818813	1272685,4036673
4803	47492,36720,7484225	1272255,9097864	4853	48128,60753,5855486	1272692,8935536
4804	47505,08976,6582089	1272265,8996629	4854	48141,33446,4791022	1272700,3324446
4805	47517,81242,5578718	1272275,8384928	4855	48154,06146,8115468	1272707,7203413
4806	47530,53518,3963646	1272285,7262773	4856	48166,78854,5318882	1272715,0572446
4807	47543,25804,1226420	1272295,5630176	4857	48179,51569,5891328	1272722,3431552
4808	47555,98099,6856596	1272305,3487149	4858	48192,24291,9322880	1272729,5780742
4809	47568,70405,0343745	1272315,0833703	4859	48204,97021,5103622	1272736,7620024
4810	47581,42720,1177448	1272324,7669850	4860	48217,69758,2723646	1272743,8949406
4811	47594,15044,8847298	1272334,3995602	4861	48230,42502,1673052	1272750,9768896
4812	47606,87379,2842900	1272343,9810971	4862	48243,15253,1441948	1272758,0078504
4813	47619,59723,2653871	1272353,5115968	4863	48255,88011,1520452	1272764,9878239
4814	47632,32076,7769839	1272362,9910604	4864	48268,60776,1398691	1272771,9168107
4815	47645,04439,7680443	1272372,4194891	4865	48281,33548,0566798	1272778,7948118
4816	47657,76812,1875334	1272381,7968840	4866	48294,06326,8514916	1272785,6218280
4817	47670,49193,9844174	1272391,1232462	4867	48306,79112,4733196	1272792,3978601
4818	47683,21585,1076636	1272400,3985770	4868	48319,51904,8711797	1272799,1229089
4819	47695,93985,5052406	1272409,6228773	4869	48332,24703,9940885	1272805,7969752
4820	47708,66395,1291180	1272418,7961483	4870	48344,97509,7910638	1272812,4200599
4821	47721,38813,9252663	1272427,9183912	4871	48357,70322,2111238	1272818,9921637
4822	47734,11241,8436575	1272436,9896069	4872	48370,43141,2032875	1272825,5132874
4823	47746,83678,8332643	1272446,0097966	4873	48383,15966,7165749	1272831,9834319
4824	47759,56124,8430609	1272454,9789514	4874	48395,88798,7000068	1272838,4025977
4825	47772,28579,8220223	1272463,8971023	4875	48408,61637,1026046	1272844,7707859
4826	47785,01043,7191246	1272472,7642204	4876	48421,34481,8733905	1272851,0879972
4827	47797,73516,4833451	1272481,5803169	4877	48434,07332,9613877	1272857,3542320
4828	47810,45998,0636620	1272490,3453927	4878	48446,80190,3156197	1272863,5694915
4829	47823,18488,4909548	1272499,0594490	4879	48459,53053,8851113	1272869,7337763
4830	47835,90987,4685037	1272507,7224867	4880	48472,25923,6188876	1272875,8470870
4831	47848,63495,1909904	1272516,3345068	4881	48484,98799,4659746	1272881,9094246
4832	47861,36011,5254972	1272524,8955105	4882	48497,71681,3753992	1272887,9207895
4833	47874,08536,4210077	1272533,4054988	4883	48510,44569,2961887	1272893,8811828
4834	47886,81069,8265065	1272541,8644726	4884	48523,17463,1773715	1272899,7906048
4835	47899,53611,6909791	1272550,2724331	4885	48535,90362,9679763	1272905,6490566
4836	47912,26161,9634122	1272558,6293812	4886	48548,63268,6170329	1272911,4565387
4837	47924,98720,5927934	1272566,9353179	4887	48561,36180,0735716	1272917,2130517
4838	47937,71287,5281113	1272575,1902442	4888	48574,09097,2866233	1272922,9185965
4839	47950,43862,7183555	1272583,3941611	4889	48586,82023,2052198	1272928,5731738
4840	47963,16446,1125166	1272591,5470696	4890	48599,54948,7783936	1272934,1767840
4841	47975,89037,6595862	1272599,6489708	4891	48612,27882,9551776	1272939,7294281
4842	47988,61637,3085570	1272607,6998654	4892	48625,00822,6846057	1272945,2311065
4843	48001,34245,0084224	1272615,6997546	4893	48637,73767,9157122	1272950,6818201
4844	48014,06860,7081770	1272623,6486393	4894	48650,46718,5975323	1272956,0815694
4845	48026,79484,3568163	1272631,5465203	4895	48663,19674,6791017	1272961,4303551
4846	48039,52115,9033366	1272639,3933988	4896	48675,92636,1094558	1272966,7281777
4847	48052,24755,2967354	1272647,1892757	4897	48688,65602,8376345	1272971,9750382
4848	48064,97402,4860111	1272654,9341518	4898	48701,38574,8126727	1272977,1709368
4849	48077,70057,4201629	1272662,6280280	4899	48714,11551,9836095	1272982,3158744
4850	48090,42720,0481909	1272670,2709055	4900	48726,84534,2994839	1272987,4098515

Verf. Sine.	Segment.	Difference.	Verf. Sine.	Segment.	Difference.
4901	48739,57521,7023354	1272992,4528688	4951	49376,12260,9580919	1273179,6416493
4902	48752,30514,1622042	1272997,4449268	4952	49388,85440,5997412	1273182,0863820
4903	48765,03511,6071311	1273002,3860262	4953	49401,58622,6861232	1273184,4801781
4904	48777,75113,9931573	1273007,2761676	4954	49414,31807,1663013	1273186,8230380
4905	48790,49521,2693249	1273012,1153514	4955	49427,04993,0893393	1273189,1149621
4906	48803,22533,846763	1273016,9035784	4956	49439,78183,1043014	1273191,3559505
4907	48815,95550,2882547	1273021,6408491	4957	49452,51374,4602519	1273193,5460034
4908	48828,68571,9291038	1273026,3271641	4958	49465,24568,0062553	1273195,6851214
4909	48841,41598,2562679	1273030,9625238	4959	49477,97763,6913767	1273197,7733045
4910	48854,14629,2187917	1273035,5469289	4960	49490,70961,4646812	1273199,8105530
4911	48866,87664,7657206	1273040,0803800	4961	49503,44161,2752342	1273201,7968671
4912	48879,60704,8461006	1273044,5628776	4962	49516,17363,0721013	1273203,7322471
4913	48892,33749,4089782	1273048,9944221	4963	49528,90566,8043484	1273205,6166933
4914	48905,06798,4034003	1273053,3750142	4964	49541,63772,4210417	1273207,4502058
4915	48917,79851,7784145	1273057,7046544	4965	49554,36979,8712475	1273209,2327848
4916	48930,52909,4830689	1273061,9833432	4966	49567,10189,1040323	1273210,9644307
4917	48943,25971,4664121	1273066,2115810	4967	49579,83400,0684630	1273212,6451434
4918	48955,99037,6774931	1273070,3878685	4968	49592,56612,7136064	1273214,2749235
4919	48968,72108,0653616	1273074,5137061	4969	49605,29826,9885299	1273215,8537709
4920	48981,45182,5790677	1273078,5885943	4970	49618,03042,8423008	1273217,3816858
4921	48994,18261,1676620	1273082,6125336	4971	49630,76260,2239866	1273218,8586686
4922	49006,91343,7801956	1273086,5855245	4972	49643,49479,0826552	1273220,2847193
4923	49019,64430,3657201	1273090,5075674	4973	49656,22699,3673745	1273221,6598380
4924	49032,37520,8732875	1273094,3786629	4974	49668,95921,0272125	1273222,9840251
4925	49045,10615,2519504	1273098,1988113	4975	49681,69144,0112376	1273224,2572805
4926	49057,83713,4507617	1273101,9680133	4976	49694,42368,2685181	1273225,4796046
4927	49070,56815,4187750	1273105,6862691	4977	49707,15593,7481227	1273226,6509974
4928	49083,29921,1050441	1273109,3535793	4978	49719,88820,3991201	1273227,7714590
4929	49096,03030,4586234	1273112,9699442	4979	49732,62048,1705791	1273228,8409897
4930	49108,76143,4285676	1273116,5353644	4980	49745,35277,0115688	1273229,8595895
4931	49121,49259,9639320	1273120,0498403	4981	49758,08506,8711583	1273230,8272585
4932	49134,22380,0137723	1273123,5133722	4982	49770,81737,6984168	1273231,7439970
4933	49146,95503,5271445	1273126,9259606	4983	49783,354969,4424138	1273232,6098049
4934	49159,68630,4531051	1273130,2876059	4984	49796,28202,0522187	1273233,4246823
4935	49172,41760,7477110	1273133,5983085	4985	49809,01435,4769010	1273234,1886295
4936	49185,14894,3390195	1273136,8580688	4986	49821,74669,6655305	1273234,9016465
4937	49197,88031,1970883	1273140,0668873	4987	49834,47904,5671770	1273235,5637333
4938	49210,61117,12639756	1273143,2247641	4988	49847,21140,1309103	1273236,1748900
4939	49223,34314,4887397	1273146,3316999	4989	49859,94376,3058003	1273236,7351168
4940	49236,07460,8204396	1273149,3876948	4990	49872,67613,0409171	1273237,2444136
4941	49248,80610,2081344	1273152,3927494	4991	49885,40850,2853307	1273237,7027806
4942	49261,53762,6008838	1273155,3468640	4992	49898,14087,9881113	1273238,1102178
4943	49274,26917,9477478	1273158,2500388	4993	49910,87326,0983292	1273238,4667252
4944	49287,00076,1977866	1273161,1022744	4994	49923,60564,5650544	1273238,7723029
4945	49299,73237,3000610	1273163,9035708	4995	49936,33803,3373573	1273239,0269510
4946	49312,46401,2036318	1273166,6539287	4996	49949,07042,3643083	1273239,2306694
4947	49325,19567,8575605	1273169,3533482	4997	49961,80281,5949777	1273239,3834581
4948	49337,92737,2109087	1273172,0018297	4998	49974,53520,9784358	1273239,4853173
4949	49350,65909,2127384	1273174,5993735	4999	49987,26760,4637531	1273239,5362469
4950	49363,39083,8121119	1273177,1459800	5000	50000,00000,0000000	

A Table for computing the Solidity of the Upright Hyperbolick Section of a Cone.

Ver. Sine	Difference.	Verfed Sine.	Difference.
000	00000,00000,00000000		
001	39991,99410,3116947	051	39576,00522,7430894
002	39983,97632,3154868	052	39567,35751,0269216
003	39975,94684,1066170	053	39558,69635,3477151
004	39967,90541,7698546	054	39550,02172,1934122
005	39959,85209,3794464	055	39541,33358,7383738
006	39951,78683,9990654	056	39532,63189,3433075
007	39943,70962,6817580	057	39523,91662,5551943
008	39935,62042,4698917	058	39515,18774,1072154
009	39927,51920,3951020	059	39506,44520,4186783
010	39919,40593,4782396	060	39497,68897,8949424
011	39911,28058,7293165	061	39488,91902,9273443
012	39903,14313,1474523	062	39480,13531,8931221
013	39894,99353,7208202	063	39471,33781,1553393
014	39886,83177,4265919	064	39462,52647,0628087
015	39878,65781,2308830	065	39453,70125,9500151
016	39870,47162,0886977	066	39444,86214,1371376
017	39862,27316,9438728	067	39436,00907,9294719
018	39854,06242,7290224	068	39427,14203,6183508
019	39845,83936,3654806	069	39418,26097,4800658
020	39837,60394,7632456	070	39409,36585,7762865
021	39829,35614,8209219	071	39400,45664,7538807
022	39821,09593,4256634	072	39391,53330,6448332
023	39812,82327,4531148	073	39382,59579,6661643
024	39804,53813,7673541	074	39373,64408,0198476
025	39796,24049,2208333	075	39364,67811,8927271
026	39787,93030,6543198	076	39355,59787,4564341
027	39779,60754,8968369	077	39346,70330,8673031
028	39771,27218,7656037	078	39337,69438,2662871
029	39762,92419,0659752	079	39328,67105,7788729
030	39754,56352,5913816	080	39319,63329,5149946
031	39746,19016,1232671	081	39310,58105,5689476
032	39737,80406,4310286	082	39301,51430,0193016
033	39729,40520,2719541	083	39292,43298,9288125
034	39720,99354,3911598	084	39283,33708,3443345
035	39712,56905,5215282	085	39274,22654,2967307
036	39704,13170,3836443	086	39265,10132,8007837
037	39695,68145,6857325	087	39255,96139,8551053
038	39687,21828,1235927	088	39246,80671,4420451
039	39678,74214,3805355	089	39237,63723,5275996
040	39670,25301,1273176	090	39228,45292,0613189
041	39661,75085,0220767	091	39219,25372,9762145
042	39653,23562,7102657	092	39210,03962,1886650
043	39644,70730,8245863	093	39200,81055,5983221
044	39636,16585,9849226	094	39191,56649,0880150
045	39627,61124,7982741	095	39182,30738,5235549
046	39619,04343,8586882	096	39173,03319,7541384
047	39610,46239,7471917	097	39163,74388,6112499
048	39601,86809,0317232	098	39154,43940,9095639
049	39593,26048,2670636	099	39145,11972,4463460
050	39584,63953,9947667	100	39135,78479,0014535

<i>Verfed Sine.</i>		<i>Difference.</i>	<i>Verfed Sine.</i>		<i>Difference.</i>
101	39126,43456,3372349	935022,6642186	151	38638,43448,4672874	1017305,5707313
102	39117,06900,1984292	936556,1388057	152	38628,24371,7234455	1019076,7438419
103	39107,68806,3120636	938093,8863656	153	38618,03518,4985749	1020853,2248706
104	39098,29170,3873514	939635,9247122	154	38607,80883,4606247	1022635,0379509
105	39088,87988,1155882	941182,2717632	155	38597,56461,2532522	1024422,2073718
106	39079,45255,1700479	942732,9455403	156	38587,30246,4956740	1026214,7575782
107	39070,70967,2058777	944287,9641702	157	38577,02233,7825015	1028012,7131725
108	39060,55119,8599921	945847,3458855	158	38566,72417,6835858	1029816,0989157
109	39051,07708,7509668	947411,1090253	159	38556,40792,7438562	1031624,9397296
110	39041,58729,4789307	948979,2720361	160	38546,07353,4831593	1033439,2606969
111	39032,08177,6254578	950551,8534729	161	38535,72094,3960953	1035259,0870640
112	39022,56048,7534582	952128,8719996	162	38525,35009,9518540	1037084,4442413
113	39013,02338,4706800	953710,3463902	163	38514,96094,5940488	1038915,3578052
114	39003,47042,1115385	955296,2955295	164	38504,55342,7405493	1040751,8534995
115	38993,90155,3731245	956886,7384139	165	38494,12748,7833127	1042593,9572366
116	38984,31673,6789719	958481,6941526	166	38483,68307,0882131	1044441,6950996
117	38974,71592,4970039	960081,1819680	167	38473,22011,9948702	1046295,0933429
118	38965,09907,2758067	961685,2211972	168	38462,73857,8164758	1048154,1783944
119	38955,46613,4445147	963293,312920	169	38452,23838,8396190	1050018,9768568
120	38945,81706,4126938	964907,0318209	170	38441,71949,3241095	1051889,5155095
121	38936,15181,5702244	966524,8424694	171	38431,18183,5728001	1053765,8213094
122	38926,47034,2871837	968147,2830407	172	38420,62535,5814069	1055647,9213932
123	38916,77259,9137264	969774,3734573	173	38410,04999,7383280	1057535,8430788
124	38907,08853,7799649	971406,1337615	174	38399,45570,1244612	1059429,6138668
125	38897,32811,1958485	973042,5841164	175	38388,84240,8630190	1061329,2614422
126	38887,58127,4510412	974683,7448073	176	38378,21006,0493427	1063234,8136763
127	38877,81797,8147997	976329,6362415	177	38367,55859,757148	1065146,2986279
128	38868,03817,5358488	977980,2789509	178	38356,88796,0061694	1067063,7445454
129	38858,24181,8422567	979635,6935920	179	38346,19808,8263007	1068987,1798637
130	38848,42885,9413097	981295,9009470	180	38335,48892,1930706	1070916,6332301
131	38838,59925,0193847	982960,9219250	181	38324,76040,0596135	1072852,1334571
132	38828,75294,2418217	984630,7775630	182	38314,01246,3500472	1074793,7095733
133	38818,88988,7527950	986305,4890267	183	38303,24504,9592390	1076741,3908012
134	38809,01003,6751829	987985,50776121	184	38292,45809,7526764	1078695,2065626
135	38799,11334,1104370	989665,5647459	185	38281,65154,5661943	1080655,1864821
136	38789,19975,1384499	991358,9719871	186	38270,82533,2058067	1082621,3603876
137	38779,26921,8174219	993053,3210280	187	38259,97939,4474937	1084593,7583130
138	38769,32169,1837272	994752,6336947	188	38249,11367,0369939	1086574,4104998
139	38759,35712,2517780	996456,9319492	189	38238,22809,6895948	1088557,3473991
140	38749,37546,0138883	998166,2378897	190	38227,32261,0899212	1090548,5996736
141	38739,37665,4401360	999880,5737523	191	38216,39714,8917218	1092546,1981994
142	38729,36065,4782246	1001599,9619114	192	38205,54516,7176534	1094550,1740684
143	38719,32741,0533426	1003324,4248820	193	38194,48604,1590635	1096560,5585899
144	38709,27687,0680228	1005053,9853198	194	38183,50026,7757706	1098577,3832929
145	38699,20898,4020002	1006788,6660226	195	38172,49426,0958424	1100600,6799282
146	38689,12369,9120680	1008528,4899322	196	38161,46795,6153719	1102630,4804705
147	38679,02096,4319333	1010273,4801347	197	38150,42128,7982518	1104666,8171201
148	38668,90072,7720710	1012023,6598623	198	38139,35419,0759458	1106709,7223060
149	38658,76293,7195768	1013779,0524942	199	38128,26659,8472586	1108759,2286872
150	38648,60754,0380187	1015539,6815581	200	38117,15844,4781034	1110815,3691552

Verfed Sine.		Difference.	Verfed Sine.		Difference.
201	38106,02966,3012669	1112878,1768365	251	37521,71117,2698805	1225328,1097446
202	38094,88018,6161724	1114947,6850945	252	37509,43336,0773972	1227781,1924833
203	38083,70994,6886403	1117023,9275321	253	37497,13093,0218656	1230243,0555316
204	38072,51887,7506466	1119106,9379937	254	37484,80379,272787	1232713,7485869
205	38061,30691,0000786	1121196,7505680	255	37472,45185,9515194	1235193,3217593
206	38050,07397,6004886	1123293,3995900	256	37460,07504,1259433	1237681,8255761
207	38038,82000,6808452	1125396,9196434	257	37447,57324,8149570	1240179,3109863
208	38027,54493,3352817	1127507,3455635	258	37435,24638,9855911	1242685,8293659
209	38016,24868,6228425	1129624,7124392	259	37422,79437,5530685	1245201,4325226
210	38004,93119,5672266	1131749,0556159	260	37410,31711,3803675	1247726,1727010
211	37993,59239,1565291	1133880,4106975	261	37397,81451,2777802	1250260,1025873
212	37982,23220,3429796	1136018,8135495	262	37385,28648,0024652	1252803,2753150
213	37970,85056,0426781	1138164,3003015	263	37372,73292,2579956	1255355,7444696
214	37959,44739,1353283	1140316,9073498	264	37360,15374,6939012	1257917,5640944
215	37948,02262,4639686	1142476,6713597	265	37347,54885,9052056	1260488,7886956
216	37936,57618,8346995	1144643,6292691	266	37334,91816,4319575	1263069,4732481
217	37925,10801,0164094	1146817,8182901	267	37322,26156,7587570	1265659,6732005
218	37913,61801,7404954	1148999,2759130	268	37309,57897,3142756	1268259,4444814
219	37902,10613,7005883	1151188,0339081	269	37296,87028,4707707	1270868,8435049
220	37890,57229,5522593	1153384,1483290	270	37284,13540,5435943	1273487,9271764
221	37879,01641,9127435	1155587,6395158	271	37271,37423,7906959	1276116,7528984
222	37867,43843,3606462	1157798,5520973	272	37258,58668,4121189	1278755,3785770
223	37855,83826,4356517	1160016,9249945	273	37245,77264,5494913	1281403,8626276
224	37844,21583,6382279	1162242,7974238	274	37232,93202,2855102	1284062,2639811
225	37832,57107,4293288	1164476,2088991	275	37220,06471,6434196	1286733,6420906
226	37820,90390,2300925	1166717,1992363	276	37207,17062,5864820	1289409,0569376
227	37809,21424,4215375	1168965,8085550	277	37194,24965,0174437	1292097,5690383
228	37797,50202,3442548	1171222,0772827	278	37181,30168,7779929	1294796,2394508
229	37785,76716,2980971	1173486,0461577	279	37168,32663,6482116	1297505,1297813
230	37774,00958,5418648	1175757,7562323	280	37155,32439,3460203	1300224,3021913
231	37762,22921,2929889	1178037,2488759	281	37142,29485,5266161	1302953,8194042
232	37750,42596,7272099	1180324,5657790	282	37129,23791,7819030	1305693,7447131
233	37738,59976,9782540	1182619,7489559	283	37116,15347,6399161	1308444,1419869
234	37726,75054,1375053	1184922,8407487	284	37103,04142,5642373	1311205,0756788
235	37714,87820,2536749	1187233,8838304	285	37089,90165,9534043	1313976,6108330
236	37702,98267,3324664	1189552,9212085	286	37076,73407,1403120	1316758,8130923
237	37691,06387,3362374	1191879,9962290	287	37063,53855,3916058	1319551,7487062
238	37679,12172,1836579	1194215,1525795	288	37050,31499,9070674	1322355,4845384
239	37667,15613,7493647	1196558,4342932	289	37037,06329,8189926	1325170,0880748
240	37655,16703,8636120	1198909,8857527	290	37023,78334,1915610	1327995,6274316
241	37643,15434,3119186	1201269,5516934	291	37010,47502,0201973	1330832,1713637
242	37631,11796,8347106	1203637,4772780	292	36997,13822,2309243	1333679,7892730
243	37619,05783,1269609	1206013,7077497	293	36983,77283,6797076	1336538,5512167
244	37606,97384,8378240	1208398,2891369	294	36970,37875,1517916	1339408,5279160
245	37594,86593,5702676	1210791,2675564	295	36956,95585,3610259	1342289,7907657
246	37582,73400,8806992	1213192,6895684	296	36943,50402,9491841	1345182,4118418
247	37570,57798,2785893	1215602,6021098	297	36930,02316,4852723	1348086,4639118
248	37558,39777,2260904	1218021,0524989	298	36916,51314,4648287	1351002,0204436
249	37546,19329,1376507	1220448,0584397	299	36902,97385,3092142	1353929,1556145
250	37533,56445,3796251	1222883,7580256	300	36889,40517,3648922	1356867,9443220

Ver. Sine.		Difference.	Verfed Sine.		Difference.
301	36875,80698,9027001	1359818,4621921	351	36155,43867,5350377	1524221,0318842
302	36862,17918,1171097	1362780,7855909	352	36140,15976,5742115	1527890,9608262
303	36848,52163,1254775	1365754,9916322	353	36124,84398,6962259	1531577,8779855
304	36834,83421,9672855	1368741,1581920	354	36109,42116,7780257	1535281,9182002
305	36821,11682,6033705	1371739,3639149	355	36094,10113,5600352	1539003,2179905
306	36807,36932,9151435	1374749,6882270	356	36078,67371,6444455	1542741,9155897
307	36793,59160,7037973	1377772,2113463	357	36063,20873,4934711	1546498,1509744
308	36779,78353,6895034	1380807,0142939	358	36047,70501,4275743	1550272,0658968
309	36765,94499,5105982	1383854,1789052	359	36032,16537,6236569	1554063,8039173
310	36752,07585,57227565	1386913,7878417	360	36016,58664,1132190	1557873,5104379
311	36738,17599,7981539	1389985,9246026	361	36000,96962,7804827	1561701,3327363
312	36724,24529,1246171	1393070,6735368	362	35985,31415,3604814	1565547,4200043
313	36710,28361,0047620	1396168,1198551	363	35969,62003,4371131	1569411,9233683
314	36696,29082,6551195	1399278,3496425	364	35953,88708,4411561	1573294,9959570
315	36682,26681,2052480	1402401,4498715	365	35938,11511,6482478	1577196,7929083
316	36668,21143,6968337	1405537,5084143	366	35922,30394,1768237	1581117,4714241
317	36654,12457,0827776	1408686,6140561	367	35906,45336,9860173	1585057,1908064
318	36640,00608,2262686	1411848,8565909	368	35890,56320,8735190	1588901,61124983
319	36625,85583,8998431	1415024,3264255	369	35874,63326,4733927	1592994,4001263
320	36611,67370,7844311	1418213,1154120	370	35858,66334,2538497	1596992,2195430
321	36597,45955,46683873	1421415,3160438	371	35842,65324,5149780	1601009,7388717
322	36583,21324,4465083	1424631,0218790	372	35826,60277,3864270	1605047,1285510
323	36568,93464,1190346	1427860,3274737	373	35810,51172,8250444	1609104,5613826
324	36554,62360,7906375	1431103,3283971	374	35794,37990,6124666	1613182,2125778
325	36540,28000,6693910	1434360,1212465	375	35778,20710,3526585	1617280,2598081
326	36525,90369,8657273	1437630,8036637	376	35761,99311,4694039	1621398,8832545
327	36511,49454,3913768	1440915,4743505	377	35745,73773,2037434	1625538,2656605
328	36497,05240,1582914	1444214,2330854	378	35729,44074,6113587	1629698,5923847
329	36482,57712,9775514	1447527,1807400	379	35713,10194,5599023	1633880,0514564
330	36468,06858,5582547	1450854,4192967	380	35696,72111,7262709	1638082,8336314
331	36453,52662,5063895	1454196,0518652	381	35680,29804,5938201	1642307,1324508
332	36438,95110,3236882	1457552,1827013	382	35663,83251,4495199	1646553,1443002
333	36424,34187,4064644	1460922,9172238	383	35647,32430,3810480	1650821,0684719
334	36409,69879,0444295	1464308,3620349	384	35630,77319,2738205	1655111,1072275
335	36395,02170,4194924	1467708,6249371	385	35614,17895,8079570	1659423,4658635
336	36380,31046,6045386	1471123,8149538	386	35597,54137,4551786	1663758,3527784
337	36365,56492,5621898	1474554,0423488	387	35580,86021,4756367	1668115,9795419
338	36350,78493,1435435	1477999,4186463	388	35564,13524,9146704	1672496,5609663
339	36335,97033,0868914	1481460,0566521	389	35547,36624,5994909	1676900,3151795
340	36321,12097,0164179	1484936,0704735	390	35530,55297,1357895	1681327,4637014
341	36306,23669,4408756	1488427,5755423	391	35513,69518,9042684	1685778,2315211
342	36291,31734,7522400	1491934,6886356	392	35496,79266,0570901	1690252,8471783
343	36276,36277,2243407	1495457,5278993	393	35479,84514,5142442	1694751,5428459
344	36261,37281,0114705	1498996,2128702	394	35462,85239,9598287	1699274,5544155
345	36246,34730,1469703	1502550,8645002	395	35445,81417,8382425	1703822,1215862
346	36231,23680,5417900	1506121,6051803	396	35428,73023,3502866	1708394,4879559
347	36216,18899,9830254	1509708,5587646	397	35411,60031,4491709	1712991,9011157
348	36201,05588,1324290	1513311,8059964	398	35394,42416,8364242	1717614,6127467
349	36185,83656,5248957	1516931,6075333	399	35377,20153,9577024	1722262,8787217
350	36170,68088,5669219	1520567,9579738	400	35359,93216,9984940	1726936,9592084

Verfed Sine.		Difference.	Verfed Sine.		Difference.
401	35342,61579,8797166	1731632,1187774	451	34410,14975,9770918	2007528,3920203
402	35325,25216,2532031	1736363,6261135	452	34390,00908,9653075	2014067,0117843
403	35307,84099,4970728	1741116,7561303	453	34369,80252,4766687	2020656,4886388
404	35290,38202,7109826	1745896,7860902	454	34349,52954,7855577	2027297,6911110
405	35272,87498,7112553	1750703,9997273	455	34329,18963,2699461	2033991,5156116
406	35255,31960,0258806	1755538,6853747	456	34308,78224,3820857	2040738,8878604
407	35237,71558,8893830	1760401,1364976	457	34288,30683,6176675	2047540,7644182
408	35220,06267,2375531	1765291,6518299	458	34267,76285,4833406	2054398,1343259
409	35202,36056,7020366	1770210,5355165	459	34247,14973,4624575	2061312,0208831
410	35184,60898,6047758	1775158,0972608	460	34226,46689,9789156	2068283,4835419
411	35166,80763,9522984	1780134,6524774	461	34205,71376,3589435	2075313,6199721
412	35148,95623,4298476	1785140,5224508	462	34184,88972,7906642	2082403,5682793
413	35131,05447,3953469	1790176,2345006	463	34163,99418,2812464	2089554,5094178
414	35113,10215,8731948	1795241,5221521	464	34143,02650,6114424	2096767,6698040
415	35095,59868,5478807	1800337,3253141	465	34121,98606,2872838	2104044,3241586
416	35077,04404,7574166	1805463,7904641	466	34106,87220,4886791	2111385,7986047
417	35058,93783,4865765	1810621,2708401	467	34079,68427,0146248	2118793,4740543
418	35040,77973,3599357	1815810,1266408	468	34058,42158,2247138	2126268,7899110
419	35022,56942,6347025	1821030,7252332	469	34037,08344,9765745	2133813,2481393
420	35004,30659,1933327	1826283,4413698	470	34015,66916,5588355	2141428,4177390
421	34985,99070,5359187	1831568,6574140	471	33994,17800,6191494	2149115,9396861
422	34967,62183,7723435	1836886,7635752	472	33972,60923,0867486	2156877,5324008
423	34949,19965,6141893	1842238,1581542	473	33950,96208,0889288	2164714,9978198
424	34930,72342,3663903	1847623,2477990	474	33929,23577,8607650	2172630,2281638
425	34912,19299,9186184	1853042,4477719	475	33907,42952,6472610	2180625,2135004
426	34893,60803,7363205	1858496,1822279	476	33885,54250,5970009	2188702,0572661
427	34874,96818,8518837	1863984,8845068	477	33863,57387,6462213	2196862,9507796
428	34856,27309,8544464	1869508,9974373	478	33841,52277,3920327	2205110,2541886
429	34837,52240,8807912	1875068,9736552	479	33819,38830,9532894	2213446,4387433
430	34818,71575,6048532	1880665,2759380	480	33797,16956,5173293	2221874,1359601
431	34799,85277,2273005	1886298,3775527	481	33774,86560,6704440	2230396,1468853
432	34780,93308,4646779	1891968,7626226	482	33752,47545,2095120	2239015,54609320
433	34761,95631,5381677	1897676,265102	483	33729,99809,9316533	2247735,2778587
434	34742,92208,1619473	1903423,762204	484	33707,43250,8980541	2256559,0335992
435	34723,82999,5311249	1909208,6308224	485	33684,77760,4671695	2265490,4308846
436	34704,67966,3092316	1915033,218933	486	33662,03226,9912756	2274533,4758939
437	34685,47068,6152453	1920897,6939863	487	33639,19534,4686855	2283692,5225961
438	34666,20266,0101259	1926802,6051194	488	33616,26562,1416779	2292972,3270076
439	34646,87517,4828325	1932748,5272934	489	33593,24184,0270254	2302378,1146525
440	34627,48781,4357958	1938736,0470367	490	33570,12268,3615044	2311915,6655210
441	34608,04015,6698168	1944765,7659790	491	33546,90676,9381464	2321591,4233580
442	34588,53177,3683598	1950838,3014572	492	33523,59264,2989708	2331412,6391756
443	34568,96223,0812040	1956954,2871558	493	33500,17876,7341613	2341387,5648095
444	34549,33108,7074211	1963114,3737829	494	33476,66351,0115522	2351525,7225091
445	34529,63789,4776346	1969319,2297865	495	33453,04512,7157035	2361838,2959487
446	34509,88219,9355227	1975569,5421119	496	33429,32173,9878175	2372338,7278860
447	34490,06353,9185164	1981866,0170063	497	33405,49130,2867677	2383043,7010498
448	34470,18144,5376464	1988209,3808790	498	33381,55155,3641742	2393974,9225985
449	34450,23544,1564825	1994600,3811639	499	33357,49992,4041153	2405162,9600589
450	34430,22504,3691121	2001039,7873704	500	33333,33333,3333333	2416659,0707820

A Table of the Common or Brigg's Logarithms, for all Numbers to 100; and all Primes, to 1100, true to sixty one Figures.

Num bers	Logarithms.
1	0.00000
2	0.30102.99956.63981.19521.37388.94724.49302.67681.89881.46217.85413.104275
3	0.47712.12547.19662.43729.50279.03255.11530.92001.28864.19069.58648.298656
4	0.60205.99913.27962.39042.74777.89448.98605.35363.79762.92421.70825.208549
5	0.69897.00043.36018.80478.62611.05275.50697.32318.10118.53789.14586.895725
6	0.77815.12503.83643.63250.87667.97979.60833.59683.18745.65280.44061.402931
7	0.84509.80400.14256.83071.22162.58592.63619.34835.72396.32396.54065.036350
8	0.90308.99869.91943.58564.12166.84173.47908.03045.69644.38632.56239.312824
9	0.95424.25094.39324.87459.00558.06510.23061.84002.57728.38139.17296.597313
10	1.00000.00000. &c.
11	1.04139.26851.58225.04075.01999.71243.02424.17067.02190.46645.30945.965390
12	1.07918.12460.47624.82772.25056.92704.10136.27365.08627.11491.29474.507206
13	1.11394.33523.06836.76920.65051.57942.32843.08297.29188.38706.82718.011910
14	1.14612.80356.78238.02592.59551.53317.12922.02517.62277.78607.39478.140624
15	1.17609.12590.55681.24208.12890.08530.62228.24319.38982.72858.73235.194382
16	1.20411.99826.55924.78085.49555.78897.97210.70727.59525.84843.41652.417098
17	1.23044.89213.78273.92854.01698.94328.33703.00075.67378.42504.63973.803685
18	1.25527.25051.03306.06980.37947.01234.72364.51684.47609.84350.02709.701587
19	1.27875.36009.52828.96153.63334.75756.92931.79511.29337.39449.75989.068189
20	1.30102.99956.63981.19521.37388.94724.49302.67681.89881.46210.85413.104275
21	1.32221.92947.33919.26800.72441.61847.75150.26837.01260.51466.12713.335006
22	1.34242.26808.22206.23596.39388.65967.51726.84748.92071.92856.16359.069665
23	1.36172.78360.17592.87886.77771.12251.18954.96975.11034.33609.61882.756055
24	1.38021.12417.11606.02293.62445.87428.59438.95046.98508.57702.14887.611480
25	1.39794.07086.72037.60957.25222.10551.01394.64636.20237.07578.29173.791451
26	1.41497.33479.70817.96442.02440.52666.82145.75979.19069.84917.68131.116184
27	1.43136.37641.58987.31188.50837.09765.34592.76003.86592.57208.75944.895969
28	1.44715.80313.42219.22113.96940.48041.62224.70199.52159.24818.24891.244899
29	1.46239.79978.98956.08733.28467.62969.25499.12542.94417.88715.38410.653969
30	1.47712.12547.19662.43729.50279.03255.11530.92001.28864.19069.58648.298656
31	1.49136.16938.34272.67966.67041.00118.41572.23037.01558.30418.46559.383498
32	1.50514.99783.19905.97606.86944.73622.46513.38409.49407.31054.27065.521373
33	1.51851.39398.77887.47804.52278.74498.13955.09068.31054.65714.89594.264047
34	1.53147.89170.42255.12375.39087.89052.83005.67757.57259.88715.49386.907959
35	1.54406.80443.50275.63549.84773.63868.14316.67153.82514.86185.68651.932075
36	1.55630.25007.67287.26501.75335.95959.21667.19366.37491.30560.88122.805862
37	1.56820.17240.66994.99680.84506.89539.12944.79829.72690.16631.25466.176799
38	1.57978.35966.16817.15675.00723.70481.42234.47193.19218.85660.61402.172463
39	1.59106.46070.26499.20652.15330.61197.44374.00298.58052.57776.41366.310566
40	1.60205.99913.27962.39042.74777.89448.98605.35363.79762.92421.70826.208549
41	1.61278.38567.19735.49450.94118.49968.18075.95305.13633.83368.70890.073567
42	1.62324.92903.97900.46322.09837.56572.24452.94518.91141.97676.98126.439281
43	1.63346.84555.79586.52640.50881.53229.22215.88087.74884.38009.34145.247493
44	1.64345.26764.86187.43117.76777.60692.01029.52430.81953.39067.01772.173939
45	1.65321.25137.75343.67937.63169.11785.73759.16320.67846.91928.31883.493038
46	1.66275.78316.81574.07408.15160.06975.68257.64657.00915.79820.47295.860329
47	1.67209.78579.35717.46441.42193.99449.20064.01598.03098.42994.78270.373294
48	1.68124.12373.75587.21814.99834.82153.08741.62728.88390.03913.00300.715755
49	1.69019.60800.28513.66142.44325.17185.27238.69671.44792.64793.08130.072699
50	1.69897.00043.36018.80478.62611.05275.50697.32318.10118.53789.14586.895725

Numbers	Logarithms.
51	1.70757.01760.97936.36583.51977.97583.45233.92076.96242.61574.22622.102341
52	1.71600.33436.34799.15963.39829.47391.31448.43661.08951.31128.53544.220459
53	1.72427.58696.00789.04563.29922.91627.25659.26955.02401.29493.77805.941030
54	1.73239.37598.22968.50709.88226.04489.83895.43685.76474.03419.61358.000244
55	1.74036.26894.94243.84553.64610.76518.53121.49385.12309.00434.45532.861116
56	1.74818.80270.06200.41635.34329.42766.11527.37881.42040.71029.10304.349173
57	1.75587.48556.72491.39883.13613.79012.04462.71512.58201.58519.34637.366845
58	1.76342.79935.62937.28254.65856.57693.74801.80224.84299.34926.23823.758244
59	1.77085.20116.42144.19026.06563.84535.14423.89267.44474.93076.52155.272857
60	1.77815.12503.83643.63250.87667.97979.60833.59683.18745.65280.44061.402931
61	1.78532.98350.10767.03388.57485.13757.32134.92633.78757.11340.42120.703489
62	1.79239.16894.98253.87488.04429.94842.90874.90718.91439.76629.31972.487773
63	1.79934.05494.53581.70530.22720.65102.86681.18838.30124.70535.71361.633662
64	1.80617.99739.83887.17128.24333.683469.5816.06791.39288.77265.12478.625648
65	1.81291.33566.42855.57399.27662.63217.83540.40615.39306.92495.97304.907635
66	1.81954.39355.41868.67325.89667.69222.63257.76750.20936.11925.75007.368321
67	1.82607.48027.00826.43414.91316.29226.06858.09496.26080.56861.38691.179160
68	1.83250.89127.06236.31896.76476.83777.32308.35439.47141.34226.34800.012234
69	1.83884.90907.37255.31616.28050.15506.30485.88976.39898.52679.20531.054711
70	1.84509.80400.14256.83071.22162.58592.63619.34835.72396.32336.54065.036350
71	1.85125.83487.19075.28609.28294.35035.42913.52704.19901.60039.19762.766499
72	1.85733.24964.31268.46023.12724.90683.70969.87048.27372.76771.73535.910137
73	1.86332.28601.20455.90107.43869.00470.30853.44528.68255.31165.74851.100020
74	1.86923.17197.30976.19202.21895.84263.62247.47511.62571.62842.10879.281074
75	1.87506.12633.91700.04686.75501.13806.12925.56637.49101.26647.87822.090107
76	1.88081.35922.80791.35196.38112.65205.91537.14875.09100.31871.46815.276738
77	1.88649.07251.72481.87146.24162.29835.66043.51902.74586.79041.85011.001740
78	1.89209.46026.90480.40171.52719.55921.93676.67980.47934.03987.26779.414841
79	1.89762.70912.90441.42799.48213.86478.24968.64828.62019.02515.03156.163513
80	1.90308.99869.91943.58564.12166.84173.47908.03045.69644.38632.56239.312824
81	1.90848.50188.78649.74918.01116.13020.46123.68005.15456.76278.34593.194626
82	1.91381.38523.83716.68972.31507.44692.57382.62987.03515.29579.56303.177842
83	1.91907.80923.76073.90383.27603.52027.26124.70016.37658.08063.04535.293708
84	1.92427.92860.61881.65843.47219.51296.73755.62200.81023.43887.83539.543555
85	1.92941.89257.14292.73332.64309.99603.84400.32393.77496.96293.78560.699410
86	1.93449.84512.43567.72161.88270.47953.71518.55769.64765.84220.19558.351768
87	1.93951.92526.18618.52462.78746.66224.37030.04544.23282.07784.97058.952625
88	1.94448.26721.50168.62639.14166.55416.50332.20112.71834.85277.87185.278214
89	1.94939.00066.44912.78472.35433.69702.44112.46651.61858.10024.45836.328694
90	1.95424.25094.39324.87459.00558.06510.23061.84002.57728.38139.17296.597313
91	1.95904.13923.21093.59991.87214.16534.96462.43133.01584.71103.36783.048259
92	1.96378.78273.45555.26229.52549.01700.17560.32338.90797.26031.32708.964604
93	1.96848.29485.53935.11696.17320.03373.53103.15038.30422.49488.05207.682155
94	1.97312.78535.99698.65962.79582.94173.69366.69279.92979.89205.63683.477569
95	1.97772.36052.88847.76632.25945.81032.43629.11829.39455.93238.90575.963914
96	1.98227.12330.39568.41336.37223.76877.58044.30410.78271.50123.85713.820029
97	1.98677.17342.66244.85178.43618.11665.57744.94258.41584.63886.69747.187207
98	1.99122.60756.92494.85663.81714.11909.76541.37353.34674.11003.93543.176974
99	1.99563.51945.97549.91534.02557.77753.25486.01069.59918.84784.48242.562703
100	2.00000.00 &c

Prime Num.	Logarithms.
101	2.00432.13737.82642.57427.41881.78222.93791.32192.89355.20644.25914.058186
103	2.01283.72247.05172.20517.10711.94580.23942.43905.23496.97603.04647.528079
107	2.02938.37776.85209.64083.45412.39461.43564.61268.16891.63401.93419.816620
109	2.03742.64979.40623.63520.05133.07613.87528.66422.04522.82798.36821.104005
113	2.05307.84434.83419.72279.52270.28609.44818.47783.83623.62209.73395.157054
127	2.10380.37209.55956.86424.69874.21827.28625.85765.63239.79239.38677.687822
131	2.11727.12556.55764.26081.00542.70697.73859.47801.63117.12162.69689.777335
137	2.13672.05671.56406.76855.29266.27114.78973.36782.29707.46423.50456.632444
139	2.14301.48002.54095.08045.64332.02319.84731.44797.32967.91785.93396.574378
149	2.17318.62684.12274.03825.73635.42628.33705.39346.71326.37222.11012.048653
151	2.17897.59472.93169.43686.90730.55337.30278.84460.93428.77687.74510.971401
157	2.19589.96524.09233.73676.14811.29897.28370.50651.90992.78552.95873.594477
163	2.21218.76044.03957.80764.00914.35925.99475.49930.97247.35985.06185.303704
167	2.22271.64711.47583.27998.40759.09920.46753.44613.38401.33125.82289.069635
173	2.23804.61031.28795.41456.05302.58758.46588.77816.83269.43492.66453.988743
179	2.25285.30309.79893.16957.03826.91773.05861.94310.72090.67852.86239.477285
181	2.25767.85748.69184.51028.97436.76412.29249.22479.59232.72291.88769.574799
191	2.28103.33672.47727.53763.50435.98270.61031.84957.36134.17824.30405.891262
193	2.28555.73090.07773.76059.72385.46353.31082.10979.21601.94604.88412.889733
197	2.29446.62261.61592.92737.17443.17717.15501.75120.64672.00453.36906.180720
199	2.29885.30764.09706.65010.00217.84419.80284.14948.88771.49827.32431.907065
211	2.32428.24552.97692.66508.15581.29927.88565.15502.58502.90193.86869.014730
223	2.34830.48630.48160.67347.51762.16240.35284.44534.24237.98021.08177.231582
227	2.35602.58571.93122.72010.30489.64753.67294.74838.78261.56058.48416.494656
229	2.35983.54823.39887.99412.79298.65526.65887.03358.93242.54328.14002.593934
233	2.36735.59210.26018.97218.91388.35476.85936.08884.54098.32289.45750.381402
239	2.37839.79009.48137.68500.16611.60147.89212.27092.22421.69429.85262.599734
241	2.38201.70425.74868.38407.68839.66454.63294.43845.75422.87941.37116.090780
251	2.39967.37214.81038.13934.05493.16706.90408.18574.66685.39315.23086.557977
257	2.40993.31233.31294.53716.28954.65919.63183.09299.89891.62261.22190.657085
263	2.41995.57484.89757.86897.22335.83870.11811.42207.55733.87652.55581.847682
269	2.42975.22800.02407.98008.72285.15871.27175.37709.54680.10337.16358.202492
271	2.43296.92908.74405.72952.11801.94875.18026.90280.28099.71147.47195.959683
277	2.44247.97690.64448.55377.77563.19599.75831.09223.84739.72572.00838.275546
281	2.44870.63199.05079.89298.39179.15275.08871.15500.84994.87733.11091.225526
283	2.45178.64355.24290.23555.89519.10570.23772.98828.25398.13326.05411.834686
293	2.46586.76203.54109.45624.37585.12602.18133.14970.80293.87633.91801.387293
307	2.48713.83754.77186.48475.46084.36539.33504.93281.89817.26663.11352.567959
311	2.49276.03890.26837.50555.30231.83253.64155.85949.18519.90441.42367.782324
313	2.49554.43375.46448.48480.81265.04861.24315.15792.98693.98571.52993.196813
317	2.50105.92622.17751.49455.32290.16378.22488.04877.22158.71549.07278.111979
331	2.51982.79937.75718.73860.81406.07340.85663.50827.13549.69614.46087.295510
337	2.52762.99008.71338.62619.00147.90194.51019.87041.58106.86338.94145.590771
347	2.54032.94747.90873.71853.53573.03206.97397.86865.56176.91243.65052.250367
349	2.54282.54269.59179.89654.01719.77159.63066.31783.00866.75487.04181.990296
353	2.54777.47053.87822.56549.70693.15968.56119.79362.71500.87293.47356.171765
359	2.55509.44485.78319.14781.65293.94413.89977.02357.64461.12862.45018.194841
367	2.56466.60642.52089.33798.75290.93006.90914.75947.52157.57773.73388.529180
373	2.57170.88318.08687.60557.68969.38701.43991.49308.33024.45651.82236.828475
379	2.57863.92099.68072.34193.14620.59454.44405.29413.87210.06923.21381.081258
383	2.58319.87739.68622.74037.90461.29502.11234.47857.39787.51936.81090.658346
389	2.58994.96013.25707.73624.49469.11731.95270.14076.41221.24688.95645.064384
397	2.59879.05067.63115.06587.68482.40668.69112.25522.37562.91876.18076.588386

Prime
Num.

Logarithms.

401	2,60314,43726,20182,30654,46411,48149,42549,75189,88963,37359,82761,562611
409	2,61172,33080,07341,80360,95027,17736,46679,00320,51595,65255,67279,407052
419	2,62221,40229,66295,30985,07395,99373,73621,25514,08166,99180,26223,814797
421	2,62428,20958,35668,30744,40669,23421,44371,09437,88488,01681,56998,058298
431	2,63447,72701,60731,60075,02803,26184,67878,49873,63233,16232,39160,168424
433	2,63643,78963,53365,44269,80664,49685,26766,08604,17833,53839,54652,633209
439	2,64245,45202,42121,37063,37411,50613,31363,46233,64482,93197,78492,698498
443	2,64640,37262,23069,56023,01044,89684,53902,83230,69456,39547,31960,218878
449	2,65224,63410,03323,17491,90263,53743,43105,35027,57942,01108,72112,409383
457	2,65991,62000,69850,22235,35461,45220,47714,05940,16155,52489,85626,587883
461	2,66370,09253,89648,14507,46818,18487,42133,71937,47244,04839,02463,622776
463	2,66558,09910,17953,13567,41931,08438,70855,40157,65450,46974,5874,838090
467	2,66931,68805,66112,16308,80510,89779,99674,10010,61401,55968,77553,654228
479	2,68033,55134,14563,22009,69639,66962,31078,27266,76340,01805,94696,676822
487	2,68752,89612,14634,33246,32050,64435,75372,38433,54413,59009,69060,272837
491	2,69108,14921,22968,47275,36909,83546,39435,54324,95219,43164,55484,935064
499	2,69810,05456,23389,91416,59050,36033,38846,73162,68889,76585,04407,216866
503	2,70156,79850,55927,39709,82240,90279,52805,50061,79311,53264,13100,626989
509	2,70671,77823,36758,74656,80767,11564,25501,75116,31022,82795,59327,732505
521	2,71683,77232,99524,47423,63411,86589,82340,55592,48804,35659,10389,037518
523	2,71850,16888,67274,23926,01265,78891,07882,05229,27624,54022,80340,618542
541	2,73319,72651,06569,43687,93482,43895,35766,02744,51126,54918,07249,958843
547	2,73798,73263,33430,77381,26473,72542,06411,41123,32573,38734,83672,544294
557	2,74585,55195,173728,90044,34334,98899,38696,26667,22982,65562,88916,047639
563	2,75050,83948,51346,22909,45827,07761,08389,89309,27510,02997,46276,527041
569	2,75511,22663,95075,17228,70555,24030,20058,87808,40566,56954,49337,662164
571	2,75663,61082,45848,05004,02841,30031,39578,08074,83371,59899,19622,253745
577	2,76117,58131,55731,42848,88336,67563,87165,18349,94631,00807,86067,506949
587	2,76863,81012,47614,47606,35592,98596,71376,19981,12599,05673,24995,578554
593	2,77305,46933,64262,60639,66715,59821,78133,09249,84055,79640,65224,216122
599	2,77742,68223,89315,37982,81725,69101,74684,25198,87827,14494,37552,485037
601	2,77887,44720,02739,52088,58506,99987,83983,48917,52297,24032,80181,145090
607	2,78318,86910,75257,58096,01956,30455,95072,14062,42317,98498,79486,868541
613	2,78746,04745,18415,03774,22662,81456,44078,29528,38564,77870,60511,887769
617	2,79028,51640,33241,68204,54661,67275,44331,98845,73431,10231,76836,317560
619	2,79169,06490,20117,97679,79674,34394,50849,41105,79264,06695,48506,134085
631	2,80002,93592,44134,31301,69298,49975,36836,15526,21483,45926,22618,519406
641	2,80685,80295,18817,42224,83770,09638,02810,30784,64091,37064,08860,016375
643	2,80821,09729,24222,07249,19385,05465,83232,48443,16034,72535,33279,471692
647	2,81090,42806,69700,38445,84305,62795,35772,33374,52752,88620,55534,781384
653	2,81491,31812,75073,92142,93105,65465,57968,44420,93073,59911,14836,799768
659	2,81888,54145,94009,86128,04346,07065,03884,71245,58914,63114,16630,487450
661	2,82020,14594,85640,23664,65718,97680,09240,24475,29555,41077,27411,001763
673	2,82801,57642,23976,84647,61709,94824,66587,84392,73852,95599,07219,527629
677	2,83058,86686,85144,31600,60170,60287,15791,96987,21869,42085,75219,422835
683	2,83442,07036,81532,56339,98239,41016,94314,12519,92074,22395,15101,356100
691	2,83947,80473,74198,40758,33677,24326,62643,33706,67025,71535,20888,200815
701	2,84571,80179,66658,65706,40223,37250,30440,16828,60606,06710,99378,642626
709	2,85064,62351,83065,54285,38844,79778,89914,12079,23464,57372,91344,715434
719	2,85672,88903,82882,60776,76506,51400,88113,55319,50785,66409,97910,278675
727	2,86153,44108,59037,83621,34642,48678,39613,39988,70242,96505,05660,709999
733	2,86510,39746,41127,94317,28131,02459,86776,12051,12268,36141,01539,967269
739	2,86864,44383,94825,73669,39855,14261,03827,78685,62960,06015,93030,162646

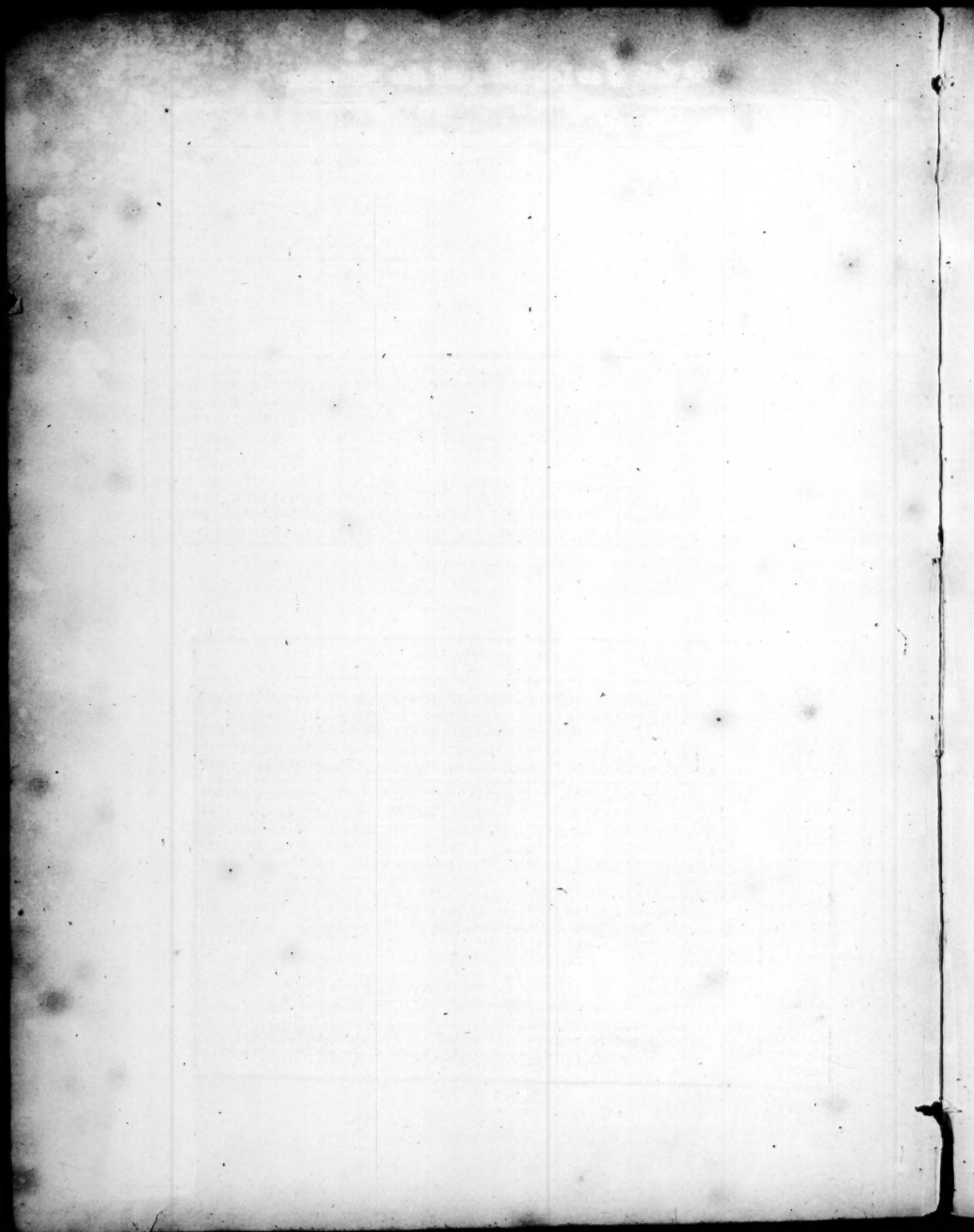
Prime Num.	Logarithms.
743	2,87098,88137,60575,29242,26723,41223,78639,86402,35201,25826,22906,426196
751	2,87563,99370,04168,38974,59851,09251,08913,79777,69486,72300,09449,287788
757	2,87909,58795,0072,75709,02275,46289,28831,29598,55610,77568,18424,909661
761	2,88138,46567,70572,82636,87243,33559,42944,66262,26115,19329,16113,770466
769	2,88592,63398,01431,0396,42922,39990,68928,55438,24266,73676,32539,540297
773	2,88817,94939,18324,90897,46881,27193,74602,82128,27448,51788,65363,250475
787	2,89597,47323,59064,55847,19105,93093,84403,00557,33235,30892,05759,509372
797	2,90145,83213,96182,34726,66008,27220,37150,60763,80048,04080,90214,871170
809	2,90794,85216,12272,30432,36285,45880,42151,46893,16537,70803,38111,022662
811	2,90902,08542,11156,03069,03308,48322,97484,96977,10258,36812,36616,489430
821	2,91434,31571,19440,77180,40593,41703,71406,12897,21030,05294,12843,731072
823	2,91539,98352,12269,83976,77077,56599,55165,51291,17431,03959,46095,528115
827	2,91750,55095,52545,67071,16671,84493,53756,13593,71081,63043,50219,579982
829	2,91855,45305,50273,55311,51367,88077,88199,00092,68851,27047,81176,310395
839	2,92376,19608,28700,27499,86012,26886,40032,82838,28125,42235,16955,539741
853	2,93094,90311,67523,02999,84110,76276,53284,29746,89789,10727,91914,383868
857	2,93298,08219,23198,16429,25296,94730,29838,44651,50336,92985,47521,566946
859	2,93399,31638,31242,30262,85442,12269,31107,61700,39788,21370,78414,600987
863	2,93601,07957,15209,59266,36308,69754,18427,13577,12652,84446,77410,023962
877	2,94299,95933,66040,51822,80278,38057,14352,55114,87250,72879,32288,432978
881	2,94497,59084,12047,91274,23677,89471,82528,26645,36543,68702,11333,796990
883	2,94596,07035,77568,58561,59053,73327,89211,59413,79689,03497,15640,730610
887	2,94792,36198,31726,39219,65090,14904,07473,08873,98971,35988,60988,634764
907	2,95760,72870,60095,25584,72139,01553,62348,76134,78601,27524,63755,591947
911	2,95951,83769,72998,24763,28008,17777,19688,55416,00035,05336,77914,276734
919	2,96331,55113,86111,26519,69202,08586,23523,20678,28235,45128,04319,378878
929	2,96801,57139,93641,76318,47673,87869,08415,56826,51327,04702,61455,402055
937	2,97173,95908,87778,26302,75767,32122,15899,55792,61709,53802,51627,468099
941	2,97358,96234,27256,90834,22975,10551,79624,82320,81816,02752,59675,858750
947	2,97634,99790,73273,41875,01137,75925,22039,01622,95145,98964,50857,664310
953	2,97909,29006,38326,40853,29398,47717,31227,47302,58220,10598,20494,365710
967	2,98542,64740,83001,67359,77060,21186,62711,98227,26427,50112,13308,635787
971	2,98721,92299,08004,86280,31389,06536,25140,40531,99480,84889,06195,031834
977	2,98989,45637,18773,07091,48028,11052,34926,25914,08310,84838,41813,133125
983	2,99255,35178,32135,62274,96349,24741,43755,19748,99290,01915,16629,651606
991	2,99507,36544,85275,32836,44343,78815,42086,41325,12663,22812,08187,848418
997	2,99869,51583,11655,71988,13717,02813,27239,27091,29009,56252,34578,237114
1009	3,00389,11662,36910,52171,52813,16509,55886,55201,95652,55260,09846,382385
1013	3,00560,94453,60280,42845,01617,20070,22165,08630,76662,06266,67962,258954
1019	3,00817,41840,05426,39490,49899,22311,83296,76922,24936,36781,15542,425256
1021	3,00902,57420,86910,24724,81480,36966,37851,03031,35315,99655,45437,518936
1031	3,01325,86652,83516,54690,96644,09013,44583,24998,28006,59445,12546,301730
1033	3,01410,03215,19620,57904,40100,62744,77060,74356,51400,55338,40683,272162
1039	3,01661,55475,57177,41240,21010,01361,62758,71828,97066,20300,27455,551333
1049	3,02077,54881,93557,85990,72007,63899,91741,19141,56191,40400,29271,212173
1051	3,02160,27160,28242,22008,37688,89097,91687,94575,69660,00863,13290,071509
1061	3,02571,53839,01340,66612,28844,73990,78253,18778,56167,59546,12209,837461
1063	3,02653,32645,23296,75697,14741,94622,85093,72551,33564,50701,42150,299662
1069	3,02897,77052,08778,01749,01456,79857,36936,27594,48925,00824,96999,029598
1087	3,03622,95440,86294,53992,62573,76344,44115,71246,06239,23536,42216,494710
1091	3,03782,47505,88341,87761,10634,29318,59826,96526,11482,20421,01725,763338
1093	3,03862,01619,49702,79226,92555,27647,43892,49476,76830,67575,50087,010561
1097	3,04020,66275,74711,13221,54832,40551,60744,80236,80562,48547,77531,0094171

A Table of 20 Logarithms and their Differences:

Natural Numb.	Logarithms.
999990	5.99999.56570,33466,09862,06478,513,5359168,69587,99461,92655,35383,63356,279
999991	5.99999.60913,32073,83868,21979,816,7675366,16434,40862,91833,50707,31365,465
999992	5.99999.55256,30247,27644,44384,339,3315373,47431,18952,82774,39761,69852,283
999993	5.99999.69599,27986,41277,59803,213,2571421,63230,77571,23772,83500,25737,458
999994	5.99999.73942,25291,24854,54321,512,0707978,00083,69792,55691,81504,39506,186
999995	5.99999.78285,22161,78462,13998,250,9004092,14234,29447,56631,11169,33723,822
999996	5.99999.82628,18598.02187,24866,38657,95736,45141,15918,21202,16170,79370,691
999997	5.99999.86971,14599,96116,72932,81775,18141,55725,44911,89892,50191,89388,043
999998	5.99999.91314,10167,60337,44178,38497,48126,62250,17919,35108,09327,86341,732
999999	5.99999.95657,05300,94936,24557,87082,46424,16033,63057,21588,69140,08641,779
1000000	6.00000,00000.&c.
1000001	6.00000,04342,94264,75615,56407,43942,64367,77070,41684,136166,7145,12161,201
1000002	6.00000,08685,88095,21869,79656,79836,05898,28197,45503,991222,9762,83804,583
1000003	6.00000,13028,81491,38849,55598,62849,44123,67446,26668,436663,6420,81280,998
1000004	6.00000,17371,74453,26641,70057,42405,94036,35925,45423,614337,2274,41930,236
1000005	6.00000,21714,66980,85333,08831,62193,08382,74570,87825,740994,6699,90513,787
1000006	6.00000,26057,59074,15010,57693,60173,19951,75785,31751,20661,18325,46207,304
1000007	6.00000,30400,50733,15761,02389,68593,83858,13937,45828,33261,37859,44029,710
1000008	6.00000,34743,41957,87671,128640,13998,19820,54722,98972,96735,47644,02905,414
1000009	6.00000,39086,32748,30828,22139,17235,54434,43391,14207,90745,10492,25622,035
1000010	6.00000,43429,23104,45318,58554,93471,63439,71839,72443,94482,49094,54144,389

	The First Differences.	Second Differences.	Third Differences.	Fourth Differences.
999990	4342,98607,74006,15501,30323,16197,46846,41400,99178,15323,68309,186	43430229,93796,78066,76190,15849,63311,08237,26269,2982,2368	86,86137,19063,62345,70628,45561,50168,85889,950,53458	26,05871,12470,96731,64824,49368,2933789,652619
999991	4342,98173,43776,22404,52256,40007,30996,78089,90940,89054,38486,818	43430143,06985,64863,83959,15197,19471,49942,45315,8260,1643	86,86111,13202,92231,00652,43839,58274,80953,472,20725	26,05860,70114,69976,01721,91874,0493648,482733
999992	4342,97739,13633,15418,87392,56048,15799,58618,47998,43738,55885,175	43430056,20900,57511,19491,78946,66397,09079,45734,4211,6447	86,86085,07352,54467,36253,53074,40862,99581,404,85196	26,05850,27763,64401,90765,17431,813706,735529
999993	4342,97304,83576,94518,29881,36556,36852,92221,31918,98004,13768,728	43429969,34841,55998,40442,22702,32566,30979,68339,1955,1092	86,86059,01512,79049,55244,33830,78099,77395,225,65355	26,05839,85417,80006,19243,62763,2218617,919841
999994	4342,96870,53607,59676,73882,96114,14150,59655,00939,29664,94217,636	43429882,48808,60315,04469,83243,73184,36368,24663,4857,0767	86,86032,95683,35972,39458,59381,94611,43675,5709,80325	26,05829,43077,16785,74448,83488,3371951,585030
999995	4342,96436,23725,10868,13567,91644,30906,86470,64571,05001,45646,869	43429795,62801,70450,69239,18522,57476,95880,70980,3562,9517	86,86006,89864,35230,64721,15707,40487,53683,129,41250	26,05819,00741,74737,43674,54123,8999258,039075
999996	4342,96001,93929,48066,43117,22405,12384,28993,68690,34021,10017,352	43429708,76820,86394,92420,07659,55986,23474,74885,1306,3663	86,85980,84055,76819,10863,01490,72405,96095,225,60854	26,05808,58411,53858,14216,68081,5758790,375396
999997	4342,95567,64220,71245,56722,29985,04724,73007,45215,59135,96953,689	43429621,90866,08137,31687,50941,27858,88734,99323,7465,3642	86,85954,78257,60732,56718,28117,34739,75561,3384,10021	26,05798,16086,54144,73373,37666,2053384,155833
999998	4342,95133,34598,80379,48584,98297,53783,45138,56480,59812,22300,047	43429535,04937,35667,44721,69317,08196,48069,28952,3094,1826	86,85928,72469,86965,81124,19672,40665,70317,437,11816	26,05787,73766,75594,08444,94074,0518994,698205
999999	4342,94599,05063,75442,12917,53575,83966,36942,08411,30859,91358,221	43429448,19034,68974,89208,06895,95257,94794,63714,7919,7020	86,85902,66692,55513,62921,12938,53274,65237,517,44806	26,05777,31452,18203,06733,87391,0513391,967010
1000000	4342,94264,75615,56407,43942,64367,77070,41684,13616,67145,12161,201	43429361,33158,08049,22837,25943,37864,28111,04527,4051,7819	86,85876,60925,66370,80952,57393,66683,59187,386,79201	26,05766,89142,81968,55544,86591,0605013,065605
1000001	4342,93830,46254,23249,35893,41530,51127,03819,85505,62617,71643,382	43429274,47307,52880,03305,11878,22655,40961,55959,7416,6967	86,85850,55169,19532,14065,15208,87149,45567,663,50852	26,05756,46838,66887,42184,79534,1061972,328349
1000002	4342,93396,16979,75941,83013,38225,39248,81164,44544,06657,97476,415	43429187,61483,03456,68312,07069,61409,26776,70804,3682,7177	86,85824,49423,14992,41108,61246,14184,85155,373,39790	26,05746,04539,72956,53962,72964,6341229,011062
1000003	4342,92932,58772,14458,79556,49912,68479,19755,17757,35853,60649,233	43429100,75684,59769,35566,29833,78353,75101,61428,1206,5687	86,85798,43687,52746,40935,83056,21675,09376,247,61490	26,05735,62246,00172,78189,92509,7577912,578300
1000004	4342,92527,58691,38774,19787,14346,38645,41402,12665,74425,48583,551	43429013,89912,21807,02777,37430,97476,66104,02799,9289,0034	86,85772,37962,32788,92402,80876,38997,58628,191,75653	26,05725,19957,48533,02179,82677,5074805,58837
1000005	4342,92093,29677,48861,97980,11569,01214,43925,46561,71625,55693,517	43428927,04165,89559,47662,63062,29848,33961,52091,5787,1111	86,85746,32247,55114,74368,67628,32142,50708,350,18923	26,05714,77674,18034,13248,06855,0791984,156730
1000006	4342,91659,00750,44696,08420,63906,38152,14077,12500,19533,97822,406	43428847,18445,63016,27943,97366,60932,49126,09749,3890,1702	86,85720,26543,19718,65695,68915,84835,42342,189,69409	26,05693,93123,20446,45891,25473,7991216,316790
1000007	4342,91247,1910,26250,45404,35962,40785,53144,63474,09784,58920,704	43428753,32751,42167,01348,52117,37909,69464,46936,3624,9083	86,85694,20849,26595,45249,23022,79661,62813,026,52619	26,05683,08555,53351,42112,00469,4012260,52803
1000008	4342,90790,43156,93429,03237,34613,88668,15234,94009,62848,22671,021	43428666,47083,27001,25608,60219,56998,90272,24245,9414,9267	86,85668,15165,75739,91897,80910,79192,22690,420,99816	26,05673,08592,07184,74693,72080,2503455,728435
1000009	4342,90356,14490,46415,76236,09005,28448,58236,03737,33602,28522,354		86,85642,09492,67146,84513,76217,07111,97655,863,71381	26,05662,66335,82543,30964,77763,1023168,612088
1000010				

Fourth Differences.	Fifth Differences.	Sixth Differences.	Seventh Differences.	Eighth Differences.	Ninth Differences.	Tenth Difference
26.05871.12470.96731.64824.49368.2933789.652619 26.05860.70114.69976.01721.91874.0493648.482733 26.05850.27763.64401.90765.17431.8137206.735529 26.05839.85417.80006.19243.62763.2218617.919841 26.05829.43077.16785.74448.83488.3371951.585030 26.05819.00741.74737.43674.54123.8999258.039075	1042356.26755.63102.57494.244014.1219.886 1042351.05574.10956.74442.235644.1697.204 1042345.84395.71521.54668.591858.8815.688 1042340.63220.44794.79274.884666.6334.811 1042335.42048.30774.29364.437269.3545.955 1042330.20879.29457.86042.324046.7663.679 1042324.99713.40843.30415.370540.6219.563 1042319.78550.64928.43592.153438.9457.628 1042314.57391.01711.06683.000560.2731.195 1042309.36234.51189.00799.990837.8901.405 1042304.15081.13360.07056.954304.0737.246 1042298.93930.88222.06569.472074.3317.287 1042293.72783.75772.80454.876331.6432.762 1042288.51639.76010.09832.250310.6992.463 1042283.30498.88931.75822.428282.1429.107 1042278.09361.14535.59547.995536.8107.216 1042272.88226.52819.42133.288369.9732.724 1042267.67095.03781.04704.394065.5763.987 1042262.45966.67418.28389.150880.4824.368 1042257.24841.43728.94317.148028.7116.407	521181.52145.83052.00836.99522.682 521178.39435.19773.64378.52881.516 521175.26726.75393.70719.22480.877 521172.14020.49910.44739.72788.856 521169.01316.43322.11322.25882.275 525165.88614.55626.95350.61444.116 521162.75914.86823.21710.16761.935 521159.63217.36909.15287.86726.433 521156.50522.05883.00972.23829.790 521153.37828.93743.03653.38164.149 521150.25138.00487.48222.97419.969 521147.12449.26114.59574.26884.525 521143.99762.70622.62602.09440.299 521140.87078.34009.82202.85563.356 521137.74396.16274.43274.53321.891 521134.61716.17414.70716.68374.492 521131.49038.37428.89430.43968.737 521128.36362.76315.24318.50939.619 521125.23689.34072.00285.17707.961	312712.82178.5437.856022.910 312710.63278.3645.846641.166 312708.44379.9365.930400.639 312706.25483.2597.949692.021 312704.06588.3341.746906.580 312701.87695.1597.164438.160 312699.68803.7364.044682.181 312697.49914.0642.230035.502 312695.31026.1431.562896.643 312693.12139.9731.885665.641 312690.93255.5543.040744.180 312688.74372.8864.870535.444 312686.55491.9697.217444.226 312684.36612.8039.923876.943 312682.17735.3928.32241.465 312679.98859.7255.784947.399 312677.79985.8128.624405.755 312675.61113.6511.193029.118 312673.42243.2403.333231.658 312671.23374.5804.887429.121	218900.179.20093.81744 218898.427.99162.40527 218896.676.79807.08618 218894.925.62027.85441 218893.174.45824.68420 218891.423.31197.55979 218889.672.18146.46679 218887.921.06671.38859 218886.169.96772.31002 218884.418.88449.21461 218882.667.81702.08736 218880.916.76530.91218 218879.165.72935.67283 218877.414.70916.35478 218875.663.70472.94066 218873.912.71605.41644 218872.161.74313.76637 218870.410.78597.97460 218868.659.84458.02537 218866.908.91893.90293	175.12093.141217 175.11935.531909 175.11777.923177 175.11620.317021 175.11462.712441 175.11305.179300 175.11147.507820 175.10989.907857 175.10832.309541 175.10674.712725 175.10517.117518 175.10359.523935 175.10201.931805 175.10044.341412 175.09886.752422 175.09729.165007 175.09571.579177 175.09413.994923 175.09256.412244	00015.76108.84 00015.76093.08 00015.76077.32 00015.76061.56 00015.76045.80 00015.76031.41 00015.76014.80 00015.75999.63 00015.75983.16 00015.75968.16 00015.75952.07 00015.75935.83 00015.75921.30 00015.75903.93 00015.75889.90 00015.75874.15 00015.75858.30 00015.75842.54 00015.75826.79



Nat. Num.	Second Differences.
999991	434.30229.93796.78066.76190.15849.63311.08237.26269.2982.2368
999992	434.30143.06985.64863.83959.15197.19471.49942.45315.8260.1643
999993	434.30056.20900.57511.19491.78946.66397.09079.45734.4211.6447
999994	434.29959.34841.55998.40442.22702.32566.30979.68339.1955.1092
999995	434.29882.48808.60315.04469.83243.73184.36368.24663.4857.0767
999996	434.29795.62801.70450.69239.18522.57476.95880.70980.3567.7517
999997	434.29708.76820.86394.92420.07659.55986.23474.74885.1306.3663
999998	434.29621.90866.08137.31687.50941.27858.88734.99323.7465.3642
999999	434.29535.04937.35667.44721.69317.08196.48069.28952.3094.1826
1000000	434.29448.19034.68974.89208.06895.95257.94794.63714.7919.7020
1000001	434.29361.33158.08049.22837.25943.37864.28111.04527.4051.7819
1000002	434.29274.47307.52880.03305.11878.22655.40961.55959.7416.6967
1000003	434.29187.61483.03456.88312.70769.61409.26776.70804.3582.7177
1000004	434.29100.75684.59769.35566.29833.78353.75101.51428.1206.5687
1000005	434.29013.89912.21807.02777.37430.97476.66104.02799.9289.0034
1000006	434.28927.04165.89559.47662.63062.29848.33961.52091.5787.1111
1000007	434.28840.18445.63016.27943.97366.60932.49126.09749.3890.1702
1000008	434.28753.32751.42167.01348.52117.37909.69464.46936.3624.9083
1000009	434.28666.47083.27001.25608.60219.56998.90272.24245.9414.9267

Third Differences.

999991	8586137,19063,62345,70628,45561,50168,85889,9565,53458
999992	8686111,13202,92231,00652,43839,58274,80953,472,20725
999993	8686085,77353,54467,36257,53074,40862,99581,404,85196
999994	8686059,01512,79049,56244,33830,78099,77395,225,65355
999995	8686032,95683,33597,23945,59381,94611,43675,709,80325
999996	8686006,89864,35230,64721,15707,40487,53683,129,41250
999997	8685980,84055,76819,10863,01490,72405,96095,225,65854
999998	8685954,78257,60732,56718,28117,34739,75561,384,10021
999999	8685928,72469,86965,81124,19672,40665,70371,437,11816
1000000	8685902,66692,55513,62921,12938,53274,65237,517,44806
1000001	8685876,60925,66370,80952,57393,66683,59187,386,79201
1000002	8685850,55169,19532,14065,15208,87149,48567,663,50852
1000003	8685824,49423,14992,41108,61246,14184,85155,373,39790
1000004	8685798,43687,52746,40935,83056,21675,09376,247,61490
1000005	8685772,37962,32788,92402,80876,38997,58628,191,75653
1000006	8685746,32247,55114,74368,67628,32142,50708,350,18923
1000007	8685720,26543,19718,65695,68915,84835,42342,189,69409
1000008	8685694,20846,26595,45249,23022,79661,62813,026,52619
1000009	8685668,15165,75739,91987,80910,79192,22690,420,99816
1000010	8685642,09492,67145,84513,76217,07111,97655,863,71381

Fourth Differences.

999991	2605871.12470.96731.64824.49368.2933789.652619
999992	2605860.70114.69576.01721.91874.0493648.482733
999993	2605850.27763.64401.90765.17431.8137206.735529
999994	2605839.85417.80006.19243.61763.2218617.919841
999995	2605829.43077.16785.74448.83488.3371951.585030
999996	2605819.00741.74737.43074.54123.8999258.039075
999997	2605808.58411.53858.14216.68081.5758790.375396
999998	2605798.16086.54144.73373.37666.2053384.155833
999999	2605787.73766.75594.08444.94074.0518994.698205
1000000	2605777.31452.18203.06733.87391.0513391.967010
1000001	2605766.89142.81968.55544.86591.0605013.065605
1000002	2605756.46838.66887.42184.79534.1051972.328349
1000003	2605746.04539.72956.53962.72964.6341229.011062
1000004	2605735.61246.00172.78189.92509.7577912.578300
1000005	2605725.19957.48533.02179.82677.5074805.585837
1000006	2605714.77674.18034.13248.06855.0791983.156732
1000007	2605704.35196.08672.98712.47307.0836616.049514
1000008	2605693.93123.20446.45893.05173.7952916.316790
1000009	2605683.50855.53351.42112.00469.4012160.552803
1000010	2605673.08593.07384.74693.72280.2503455.72843
1000011	2605662.66335.82543.30964.77763.1023168.612028

Natural Numbers	Fifth Differences.	Sixth Differences.
999991	1042356.26755.63102.57494.244014.1219.886	521181.52145.83052.00836.99522.682
999992	1042351.05574.10956.74442.235644.1697.204	521178.39435.19773.64378.52881.516
999993	1042345.84395.71521.54668.591858.8815.688	521173.26726.75393.70719.22480.877
999994	1042340.63220.44794.79274.884666.6334.811	521172.14020.49910.44739.72888.856
999995	1042335.42048.30774.29364.437269.3545.955	521169.01316.43322.11322.25882.276
999996	1042330.20879.29457.86642.324046.7663.679	525165.88614.55626.95350.61444.116
999997	1042324.99713.40843.30415.370540.6219.563	521162.75914.86823.21710.16761.935
999998	1042319.78550.64928.43592.153438.9457.628	521159.63217.36909.15287.86726.433
999999	1042314.57391.01711.06683.000560.2731.195	521156.50522.05883.00972.23829.790
1000000	1042309.36234.51189.00799.990837.8901.405	521153.37828.93743.03653.38164.149
1000001	1042304.15081.13360.07056.954304.0737.256	521150.25138.00487.48222.97419.969
1000002	1042298.93930.88222.06569.472074.3317.287	521147.12449.26114.59574.26884.525
1000003	1042293.72783.75772.80454.876331.6432.762	521143.99762.70622.62602.09440.299
1000004	1042288.51639.76010.09832.250310.6992.463	521140.87078.34009.82202.85563.356
1000005	1042283.30498.88931.75822.428282.1429.107	521137.74396.16274.43274.53321.891
1000006	1042278.09361.14535.59547.995536.8107.216	521134.61716.17414.70716.68374.492
1000007	1042272.88226.52819.42133.288369.9732.724	521131.49038.37428.89430.43968.737
1000008	1042267.67095.03781.04704.394065.5763.987	521128.36362.76315.24318.50939.619
1000009	1042262.45966.67418.28389.150880.4824.368	521125.23689.34072.00285.17707.961
1000010	1042257.24841.43728.94317.148028.7116.407	

	Seventh Differences.	Eighth Differences.	Ninth Differences.	Tenth Differences.
999991	312712.82178.5437.856022.910	218900.179.20093.81744		00015.76108.84
999992	312710.63278.3645.846641.166	218898.427.99162.40527	175.12093.141217	00015.76093.08
999993	312708.44379.9365.930400.639	218896.676.79807.08618	175.11935.531909	00015.76077.32
999994	312706.25483.2597.949692.021	218894.925.62027.85441	175.11777.923177	00015.76061.56
999995	312704.06588.3341.746906.580	218893.174.45824.68420	175.11620.317021	00015.76045.80
999996	312701.87695.1597.164438.160	218891.423.31197.55979	175.11462.712441	00015.76031.41
999997	312699.68803.7364.044682.181	218889.672.18146.46679	175.11305.109300	00015.76014.80
999998	312697.49914.0642.230035.502	218887.921.06671.38855	175.11147.507820	00015.75999.63
999999	312695.31026.1431.562896.643	218886.169.96772.31002	175.10989.907857	00015.75983.16
1000000	312693.12139.9731.885665.641	218884.418.88849.21461	175.10832.309541	00015.75968.16
1000001	312690.93255.5543.040744.180	218882.667.81702.08736	175.10674.712725	00015.75952.07
1000002	312688.74372.8864.870535.444	218880.916.76530.91218	175.10517.117518	00015.75935.83
1000003	312686.55491.9697.217444.226	218879.165.72935.67283	175.10359.523935	00015.75921.30
1000004	312684.36612.8039.923876.943	218877.414.70916.35478	175.10201.931805	00015.75903.93
1000005	312682.17735.3892.832241.465	218875.663.70472.94066	175.10044.341412	00015.75889.90
1000006	312679.98859.7255.784947.399	218873.912.71605.41644	175.09886.752422	00015.75874.15
1000007	312677.79985.8128.624405.755	218872.161.74313.76637	175.09729.165007	00015.75858.30
1000008	312675.61113.6511.193029.118	218870.410.78597.97460	175.09571.579177	00015.75842.54
1000009	312673.42243.2403.333231.658	218868.659.84458.02537	175.09413.994923	00015.75826.79
1000010	312671.23374.5804.887429.121	218866.908.91893.90293	175.09256.412244	



POLYEDRA:

OR

The Construction and Dimensions

OF

SOLID BODIES,

Which have several BASES.



Lthough a Discourse of *Solid Bodies* be an uncommon and neglected Part of *Geometry*, yet that it is no inconsiderable or unprofitable Improvement of the Science will (no doubt) be readily granted by such, whose Genius tends as well to the Practical as Speculative Parts of it, for whom this is chiefly intended.

Though enough may seem to have been writ concerning the *Five Regular Bodies*, by *Euclid* and others, yet I purpose not to be confin'd to the usual Methods, nor to insist at all, or very little, upon such Matters as are treated of by others; that Part being only premis'd, as an Introduction to some other *Solids* that may seem of a superior Degree, whereof *Twelve* (I presume) *New Geometrical Bodies* are herein to be exhibited to publick Notice; some of which may possibly be as Elegant and Beautiful (if truly form'd according to the Rules herein prescrib'd) as any of that Nature hitherto known.

The Method design'd is, *First*, after a short Description, to lay down certain Rules accurately to form or cut every of the Bodies out of a *Cube* or *Parallelepipedon* (or both) as may be most proper, easie and expeditious; and some of them also whose Bases are most numerous from the Sphere, and other more simple Bodies, (with Figures adapted to every of them) all the requisite Parts or Distances being express'd in Surd Numbers or Species equivalent, for the greater Accuracy, and likewise by a sufficient Number of Decimal Figures.

2dly, To give the exact Dimensions of the Perpendiculars, or Diagonals and Sides of each of the Bases in Surds also, or in Species and Decimal Figures.

3dly, The Radii or Semidiameters of the several Circumscribing and Inscrib'd Spheres.

4thly, The Area of the Bases distinct, and the whole Superficies.

5thly, The total Solidity of every Body: All in Surds or Species, and in Decimal Numbers.

Besides (in distinct Papers) there will be small but exact Draughts of every Body truly delineated, according to the strictest Rules of Perspective, of most of them in several Postures, such as may give the truest Idea and most just Representation of their Forms; together with Figures of the several Solids out of which they are to be cut, and all the Lines necessary, in order thereto, drawn upon them, distinguish'd by Letters, viz. upon the inclining Bases (to avoid Confusion) only so many as serve for one or two Sections of every Kind, but upon the erect Front of every Cube all the Lines that must be, are drawn (tho' some without Letters) more clearly to shew how every Base ought to appear after the Delineation is finish'd, before any Section is cut.

The Semidiameter of the Inscrib'd Sphere, in all (except the *Tetraedron*) is propos'd to be $= b = 1,000, \&c.$ that the Altitude or nearest Distance of the Parallel Bases of every of the Bodies may be rendred equal, whereby their Proportion to each other, and to the *Cube* and *Sphere* will be the more evident. I have propos'd, and endeavour'd to express the several Quantities in Surd Numbers, since in every of the *Solids* (except two) it is most proper and natural, and in all (where attainable) 'tis most perfect and unlimited, consequently will be most satisfactory to the Judicious. And every of the Quantities requisite for the other two Bodies, are express'd in *Species* equivalent to *Surds*; yet for the Ease of such as may account their Reduction too great a Labour, I have rendred all into such a competent Number of Decimal Figures as will answer any Design that may be propos'd. And here it may not improperly be observ'd, That the Computations necessarily requir'd about these *Solid Bodies*, afford such an Exercise and Improvement of the Doctrine of *Surds*, as can scarce be supposed to occur in any other Part of *Geometry*.

Although the *Cube* and *Sphere* are *Solids* so common and well known, as to need no Description, yet being the Original Generative Bodies, all the rest having some Relation to, or Dependance upon them; and besides, to render their mutual Comparison more easie and obvious, I shall give some Account of their constituent Parts.

The *Cube* AGDHLNP, Fig. 1. is a *Solid* comprehended under six equal Quadrangles or Squares: The Side $AG = HL = PN, \&c. = b = 1,000, \&c.$ The Diagonal $AH = HN = NA = b\sqrt{2} = 1,41421356237309504880169$: The Diameter of the circumscribing *Sphere*, or internal Diagonal $= b\sqrt{3} = 1,73205080756887729353$: The Diameter of the inscrib'd *Sphere* $= BE = b = 1$: The Area of each Square Base $= bb = 1$: The whole Superficies $= 6bb = 6$. The Solidity $= bbb = 1$.

The Diameter of the *Sphere* ABDE, Fig. 3. $= b = 1,000, \&c.$ The Superficies of the *Sphere* $= 3,14159265358979323846$: Its Solidity $= ,5235987755982988730771$.

The Tetraedron, Fig. 4.

Is a solid Pyramidal Body comprehended under four equal Equilateral triangular Bases, like BHA, Fig. 2. The easiest and least wastful way of cutting it, is from the *Cube*, Fig. 1. Make the Side of the *Cube* $AG = AD, \&c. = \frac{1}{2}b\sqrt{3} = ,866025403784438647$. Upon every Base draw a Diagonal so as to join to each other, as, AH, HN, NA; and by these Diagonals cut off four Pyramidal Segments, like AHDNA, which will per-

perfect the Body, so that its perpendicular Height from the Center of each Base to the Angle opposite or Vertex, shall be $b = 1,000$, &c. But the common way of cutting the *Tetraedron*, is from a *Parallelepipedon*, *Fig. 2.* whose Sides BA, CD, NM, must be $\frac{1}{2}b\sqrt{6} = 1,2247448713915890491$, CN, DM, AL = $b = 1,000$, &c. and CB, DA, ML, = $\frac{1}{2}b\sqrt{2} = 1,0606601717798212866$. Bisect all the Sides with the Lines EH, IF, HG, OP, FN, PZ; join BH and HA and draw the like Lines on the opposite Side, which will form one triangular Base; set off $\frac{1}{4}b\sqrt{2} = \frac{1}{3}CB = ,3535533905932737622$ from B to R, and from A to K draw the Parallel RK, join KL, the Point X shall be the *Vertex*: Cut off the Prism RBAKL: Make BS = AT = HW = HV = $\frac{1}{3}BA = \frac{1}{2}b\sqrt{6} = ,4082482904638630164$. Draw the Lines WT, VS intersecting each other in the *Vertex* X. Join WG, VG, TL and S with the opposite Angle; cut off the two Segments GWTADML, GVSBCN, whereby the Body will be finish'd at three Sections. Always observing to draw all the Lines upon the Cube or *Parallelepipedon* before any Segment is cut off; and new Lines must be drawn upon the Plane made by every Section, from the Termination of the Lines which are cut off on every side: *Ex. gr.* After the Prism RBKAL is cut off, new Lines must be drawn upon the Plane thereby made, from X to L and to the opposite Angle; tho' no Notice need be taken hereof in the former Method of cutting this Body from the Cube (which will certainly be the more expeditious, as well as the more plain and easie way, tho' it require one Section more, there being so little Trouble in the Preparation;) But the Neglect hereof, where there are more Bases, will involve the Work in an inextricable Confusion; so that 'tis of absolute Necessity it should be observed in the cutting of all the other Bodies, where the Lines and Sections will be more numerous: Wherefore this Caution is to be taken along through the whole.

The Side of the Triangle or Base BH = HA = AB = $\frac{1}{2}b\sqrt{6} = 1,2247448713915890491013575$.

The Perpendicular of the Triangle HE = $\frac{1}{4}b\sqrt{2} = 1,0606601717798212866$. Radius of Circle circumscribing the Base = $\frac{1}{2}b\sqrt{2} = ,70710678$, &c. Radius Circle inscrib'd = $\frac{1}{4}b\sqrt{2} = ,35355339059327376220042$.

Radius of the circumscribing Sphere = $\frac{1}{4}b = 75$. Radius of inscrib'd Sphere = $\frac{1}{4}b = ,25$.

Radius of Sphere passing through the middle of every Side = $\frac{1}{4}b\sqrt{3} = ,43301270189221932338186$.

The Area of the Base or Triangle = $\frac{1}{2}bb\sqrt{3} = ,649519052838328985073$.

The Superficies = $\frac{1}{2}b^2\sqrt{3} = 2,598076211353315940291$. The Solidity = $\frac{1}{4}b^3\sqrt{3} = ,2165063509461096616909$.

The Octaedron, Fig. 5.

Is a Solid comprehended under Eight equal equilateral triangular Bases, consisting of two square Pyramids, whose Bases are join'd together.

The easiest and most simple way of cutting it, is out of the *Parallelepipedon*, *Fig. 6.* whose Length EG, CA, QM, = $b\sqrt{3} = 1,7320508$, &c. Breadth and Height CE, AG, MK, GK, AM, CQ, = $\frac{1}{2}b\sqrt{6} = 1,22474487139$, &c. Bisect all the Sides by the Lines DH, BF, BP, RN, NI, HL, &c. Draw Diagonally BD, DF, FH, HB, and BR, RP, PN, NB, and the like on the two opposite Sides. Cut off the Prisms BHLMP, BNIGF, FHGKL, PNMKI, DCBPQ, RBCEF, DEF and RQP, in all Eight, finishing the *Octaedron*, whose Altitude or nearest Distance betwixt the opposite parallel Bases will be $= b = 1,0000$, &c.

But a nearer way, and less expensive of Materials, will be from the *Parallelepipedon*, *Fig. 7.* whose Length DE, BA, LK = $b\sqrt{2} = 1,41421356$, &c. Height BL, AK, EG = $b = 1$.

$b = 1$. Breadth BD, EA, GK = $\frac{1}{2}b\sqrt{6} = 1,22474487$, &c. Biseft the Sides BD, AE, KG, with the Lines CP, PN: Set off EH = AF = LM = $\frac{1}{4}b\sqrt{2} = ,3535533905932737622$: Draw the Parallel FH, and join FC and CH completing one triangular Base CFH: Draw the like on the opposite Side, join MB, MF, FK; make PR = PQ = $\frac{1}{4}AE = \frac{1}{8}b\sqrt{6} = ,408-248290463863016367$: Join RN, QN, QG, FR, HQ: Cut off the Prism FHEAKG and its opposite BMLD; continue the Lines on those Planes; then cut off the four Segments MFRNK, HQNGE, CFMLB, and the like under the Triangle CHD, whereby the Body is form'd at fix Sections.

It may also be cut out of the Cube, Fig. 1. making all its Sides = $b\sqrt{3} = 1,73205-080756888$, crossing every Side with two Diagonals AH, GD, &c. then cutting off Eight such Pyramidal Segments, as in the Tetraedron; but this being so easie and wastful, needs not further be insisted on.

The Side of the Triangle or Base FH = CH = $\frac{1}{2}b\sqrt{6} = 1,22474487$, &c. The Perpendicular CO = $\frac{1}{4}b\sqrt{2} = 1,06066$, &c. The Radius of the Circumscribing Sphere = $\frac{1}{2}b\sqrt{3} = ,866025403784438646764$. Radius of the Sphere Inscrib'd = $\frac{1}{2}b = 5$. Radius of the Sphere passing through the middle of each Side = $\frac{1}{4}b\sqrt{6} = ,61237243569579452455$. The Area of the Triangle or Base = $\frac{1}{4}bb\sqrt{3} = ,64951905$, &c. The Superficies = $3b^2\sqrt{3} = 5,1961524227066$ &c. The Solidity of the Octaedron = $\frac{1}{6}b^3\sqrt{3} = ,86602540$ &c. approaching nearest to the Cube.

The Dodecaedron, Fig. 9.

Is a Solid comprehended under Twelve equal equilateral Pentagonal Bases. The common and most simple Method of cutting it, is from the Cube, Fig. 8. whose Sides AD, DC, &c. must be = $b\sqrt{\frac{5}{2} - \frac{1}{2}\sqrt{5}} = 1,1755705045849462583374$, that its Altitude may be = $b = 1$; Biseft every Base with the entire Lines EG, NL, OH, and the prickt Lines NP, RO, GQ, in contrary Positions upon the contiguous Bases: From either end of the prickt Lines set off both ways $\frac{1}{4}b\sqrt{\frac{5}{2} - \frac{1}{2}\sqrt{5}} = ,22451398828979268622 = NS, NW, PV, PT, GX, GF, QY, QZ, Ob, Oe, Rq, Rd$. Draw the Parallels WV, ST, XY, FZ, ed, bq, and join NX, PF, SO, WR: Cut off the Prismes NBXYKL, SBOHCT, GBedAE, RAWVD, PCFZI, &c. viz. one off every Edge of the Cube, in all Twelve.

But a more expeditious and less wastful way of cutting this Body, will be from the Parallelepipedon, Fig. 10. whose Length DC, AB, EG = $b\sqrt{5} - b = 1,236067977499-789696409$; its Breadth DA, BC, FG = $b\sqrt{\frac{5}{2} - \frac{1}{2}\sqrt{5}} = 1,17557050$, &c. its Height AE, BG, CF = $b = 1$: Biseft every side with the Lines HI, LK, KM, RO, OP, IN, since from these middle Points the several Distances may much more commodiously be set off than from the Angles.

1. Make KQ = LS = Mq = $\frac{1}{4}b\sqrt{5} - \frac{1}{4}b = ,3090169943749474241$, and OT = PV = RM = $\frac{1}{2}b\sqrt{5} - b = ,1180339887498948482046$. Draw the Parallels QS, TV, join QT, qm, whereby the Prism QBTVCs, and another like it under the Triangle qEm, may be cut off, in all Two.

2dly, Make IW = IX = $b\sqrt{\frac{5}{2} - \frac{1}{2}\sqrt{5}} = ,1241082803466790462860723$, and HZ = HY = Nt = Ny = Il = Io = $b\sqrt{\frac{5}{2} - \frac{1}{2}\sqrt{5}} = ,525731112119133606026$, and Oh = Ru = Pg = $\frac{1}{2}b - \frac{1}{4}b\sqrt{5} = ,381966011250105151795$. Draw the Lines YX, ZW, Wh, uh, Xg, ht, yg, whereby the Segments WBhuAZ, YXgCD may be cut off, and two more like these off the opposite Angles, in all Four.

3dly, Set off Ld = Ke = Mr = $\frac{1}{4}b\sqrt{5} - \frac{1}{4}b = ,045084971874737120511467$, and Hb = Ha = Np = Nk = $b\sqrt{1 - \frac{1}{2}\sqrt{5}} = ,32491969623290632615587$, and Kn = Mf

$MF = \frac{1}{4}b - \frac{1}{4}b\sqrt{5} = ,5729490168751577276931$: Draw the Lines ad , be (compleating the Pentagon $ab\gamma\delta\epsilon$) and ef , Br , lk , po , ox , whereby the Segments $beAEf$, $klBnrGk$, may be cut off; and two more like these off the opposite Edges, in all Four, which will finish the Body by ten Sections, so as its Altitude shall be $= b = 1$.

The Radius of the Circle circumscribing the Pentagonal Base $= \frac{1}{4}b - \frac{1}{4}b\sqrt{5} = ,38196-6011250105151795413$. Radius of the Circle inscrib'd in it, $rx = \frac{1}{4}b\sqrt{5} - \frac{1}{4}b = ,30-901699$ &c. The Side of it $= b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} = ,449027976579585372442$. The Radius of the Circumscribing Sphere $= \frac{1}{2}b\sqrt{15} - 6\sqrt{5} = ,629204286182409484852878$. Radius of the Sphere passing through the middle of every Side $= \frac{1}{2}b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} = ,5877-852522924731291687$. Radius of the inscrib'd Sphere $= \frac{1}{2}b = ,5$.

The Area of one Pentagon or Bale $= \frac{1}{4}bb\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} = ,346893189282219391817$.

The Superficies $= 15b^2\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} = 4,1627182713866327018$.

The Solidity of the *Dodecaedron* $= \frac{1}{2}b^3\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} = ,693786378564438783635$.

The Icosaedron, Fig. 11.

Is a Solid contained within twenty equal equilateral triangular Bases. To cut this Body after the common Method, so that its Altitude shall be $= b = 1$.

The Side of the Cube, *Fig. 12* must be $\frac{1}{2}b\sqrt{15} - \frac{1}{2}b\sqrt{3} = 1,070466269319269795656$. Bisect every Side with the Lines EG , NP , NL , RO , OH , GQ , alternately prickt and entire, as in the *Dodecaedron*. Then 1st. From every of the middle prickt Points set off both ways to S , W , T , V , X , Y , Z , a , b , d , f , e , &c. $\frac{1}{4}b\sqrt{3} - \frac{1}{4}b\sqrt{15} = ,330792269124-803748936$. Draw the Parallels WV , ST , XZ , Ya , be , df , and the like on the opposite Sides. Join NX , Gb , SO , WR , YP , Pa , $N\beta$, &c. by which the Prisms $SBOHCT$, $XBNLKZ$, $bBGEAe$ may be cut off, and one like these off every other Edge of the Cube, in all Twelve.

2^{dly}, From every middle Point set off on both Sides $\frac{1}{2}b\sqrt{15} - b\sqrt{3} = ,20444086553-48311488923 = Pm = Pl = Ng = Nh = Ei = Ek$, &c. Join hn , gk , im , lo , oq , nt , rw , pf , th , &c. Cut off the Pyramids $hBnt$, $kAgx$, $lCoq$, and the like off every other Angle, in all Eight, forming the Body by twenty Sections. But from the Parallelepipedon, *Fig. 13*. it may with less Waste and more Expedition be form'd, making the Length $DC = AB = GF = b\sqrt{5} - b = 1,2360679774997896964$; the Breadth $BC = AD$, $= GE = \frac{1}{2}b\sqrt{15} - \frac{1}{2}b\sqrt{3} = 1,07046626931926979566$, and the height $= ED = AG = FB = b = 1$. Bisect every Side by the Lines, HI , Mk , IK , LM , LN , pm .

1. Make $IO = HR = K\beta = \frac{1}{4}b - \frac{1}{4}b\sqrt{5} = ,1909830056250525758977$, and $LP = NQ = M\kappa = \frac{1}{2}b\sqrt{5} - b = ,1180339887498948482$: Draw the Parallels OR , PQ , and the like on the opposite Sides from β and κ : Join PO , $\beta\kappa$: Cut off the Prism $OAPQDR$, and another like it under $\beta F\kappa$, in all Two.

2^{dly}, Make $HW = IS = Ky = \frac{1}{4}b\sqrt{5} - \frac{1}{4}b = ,54508497187473712051$, and $kX = kT = p\mu = p\lambda = \frac{1}{4}b\sqrt{15} - \frac{1}{4}b\sqrt{3} = ,12629391035655409926$ &c. and $FV = Av = D\xi = \frac{1}{4}b\sqrt{5} - \frac{1}{4}b = ,47983738762488433025$: Draw the Lines ST , WX , (limiting the Triangle) and SV , yv , $v\mu$, $\lambda\xi$, whereby the Pyramids $STBV$, $yv\mu G$ may be cut off; and two more like them off the opposite Angles under the Triangles WCX and $\lambda E\xi$, in all Four.

3^{dly}, Make $Af = Do = F\delta = \frac{1}{2}b\sqrt{5} + \frac{1}{4}b = ,585410196624968454461$, and $mn = mi = \frac{1}{2}b\sqrt{3} - \frac{1}{2}b\sqrt{15} = ,22052817941653583262$, and $l\beta = Kh = \frac{1}{2}b\sqrt{5} - \frac{1}{4}b = ,47-98373876$ &c. and $pq = pg = \frac{1}{2}b\sqrt{15} - \frac{1}{2}b\sqrt{3} = ,3568220897897730899319$: Join

S f

f i,

fi, no, ig, nq, fh, $\beta\delta$; by which the Segments giAfhG, noDEq, and two more like these from the opposite Angles, may be cut off, in all Four.

4thly, Make $Ix = Hz = Kt = \frac{2}{3}b\sqrt{5} - \frac{1}{3}b = ,163118960624631968716$, and $Ia = Hw = \frac{2}{3}b - \frac{1}{3}b\sqrt{5} = ,600813061875578334875$, and $mr = m\zeta = \frac{1}{3}b\sqrt{15} - \frac{1}{3}b\sqrt{3} = ,356822089$ &c. and $Lz = Nf = \frac{1}{3}b - \frac{1}{3}b\sqrt{5} = ,45491502812526287949$: Join xw, $\alpha\zeta$, xy, tS, Sr, rf, $\epsilon\zeta$; hence four Segments may be cut off, viz. tSrfEGt, $\epsilon\zeta$ DEG ϵ , yxwCBfy, $\alpha\zeta$ CBz exactly alike, in all Four.

5thly, Make $mc = mZ = \frac{2}{3}b\sqrt{15} - \frac{1}{3}b\sqrt{3} = ,27258782071310819852$, and $kY = kd = pu = p\pi = b\sqrt{3} - \frac{1}{3}b\sqrt{15} = ,44105635883307166524$; and $La = Mb = Ne = b\sqrt{5} - 2b = ,236067977499789696409$. Draw the Lines ZY, cd, ce, Za, ab, au, $e\pi$: Cut off the Segments YZAabBY, auGFba, and two more exactly like and directly opposite to these, in all Four; finishing the *Icosaedron* by eighteen Sections.

The Side of the Triangle or Base $= \frac{2}{3}b\sqrt{3} - \frac{1}{3}b\sqrt{15} = ,661584538249607497872$: Its Perpendicular $= \frac{2}{3}b - \frac{1}{3}b\sqrt{5} = ,5729490168751577276931$: The Radius of the Circle circumscribing it $= \frac{1}{3}b - \frac{1}{3}b\sqrt{5} = ,3819660112501051517954$: Radius of the Circle Inscrib'd $= \frac{1}{3}b - \frac{1}{3}b\sqrt{5} = ,1909830056250525758977$: The Radius of the Circumscribing Sphere $= \frac{1}{3}b\sqrt{15} - \frac{1}{3}b\sqrt{3} = ,62920428618240948485$: Radius of the Sphere passing through the middle of every Side $= \frac{1}{3}b\sqrt{15} - \frac{1}{3}b\sqrt{3} = ,53523313465963489791$: Of the Inscrib'd Sphere $= \frac{1}{3}b = ,5$: The Area of the Base $= \frac{1}{3}b^2\sqrt{3} - \frac{2}{3}b^2\sqrt{15} = ,189527105384958900064$: The whole Superficies $= \frac{10}{3}b^2\sqrt{3} - \frac{4}{3}b^2\sqrt{15} = 3,79054210769917800128$: The Solidity $= \frac{1}{3}b^3\sqrt{3} - \frac{1}{3}b^3\sqrt{15} = ,631757017949806300021$.

Besides these Five Regular Bodies, there are two others no less known, which well deserve Notice.

1. The Body of Twelve Rhombs, Fig. 14. 1, 2.

Is a Geometrical Solid apparently deriv'd either from the *Cube* or *Octaedron*, by fixing Planes upon every Edge perpendicular to that Axis which passeth from the Center of the Body through the middle of each Edge or Side. These Planes coinciding directly over the Centers of every Base, in the *Cube* terminate in that solid Angle which is compos'd of four of the Acute Angles of the *Rhombs*; in the *Octaedron* of three of their Obtuse Angles: So that the Side of the *Cube* becomes the shorter Diagonal of the Rhomb, and the Side of the *Octaedron* the longer. The Dimensions of both being reduc'd to the Proportion so chosen that the Altitude may be $= b = 1$, it is cut out of a *Parallelepipedon*, Fig. 15. whose length GH, FA, MK $= b\sqrt{2} = 1,414213562373$ &c. breadth and height FM, AK, HI, FG, AH, IK, $= b = 1$: Bisect the longest Sides round about with the Lines BE, BL, &c. Draw the transverse Lines, FE, BG, BH, AE, FL, BM, BK, LA, &c. forming the Rhombs BCDE, BNLP; and the like on the opposite Sides. Cross the two other Sides with Diagonals, as AI, HK, &c. Cut off the triangular Pyramids BHAKB, BGFBM, AEHIA, IKLAI, and the like off the other four opposite Angles; finishing the Body at eight Sections. The Side of the Rhomb BD $= \frac{1}{2}b\sqrt{6} = ,61237243569579452455$. The longer Diagonal BE $= b = 1$: The shorter CD $= \frac{1}{2}b\sqrt{2} = ,7071067811865475244$: The Radius of the Circumscribing Sphere $= \frac{1}{2}b\sqrt{2} = ,7071$ &c. Of the Inscrib'd $= \frac{1}{2}b = ,5$. Radius of the Sphere which passeth through the Obtuse Angles of the Rhombs $= \frac{1}{2}b\sqrt{6} = ,61237$ &c. The Area of the Rhomb $= \frac{1}{2}b^2\sqrt{2} = ,3535533905932737622$: The Superficies $= 3b^2\sqrt{2} = 4,2426406871192851464$: Lastly, the Solidity $= \frac{1}{2}b^3\sqrt{2} = ,70710678118654752440$.

2. The Body of Thirty Rhombs, Fig. 16. 1, 2.

Is a very elegant Geometrical Solid, evidently deduc'd either from the *Dodecaedron* or *Icofaedron*, by placing Planes upon all the Edges of either of them, every way perpendicular to that Axis which passeth through the middle of each Side or Edge; so that the Side of the *Dodecaedron* becomes the shorter Diagonal of the Rhomb, and the Side of the *Icofaedron* the longer: Consequently 'tis easily reduc'd back to a *Dodecaedron*, if the acuter Solid Angles be cut off through the five adjacent shorter Diagonals of the Rhombs; or to an *Icofaedron*, if the obtuser solid Angles be cut off through the three nearest longer Diagonals.

This Body is so commodiously cut from the Cube as to exclude all other Methods, Fig. 17. Make the Sides of the Cube AB, BC, AE, &c. = $b = 1$: From every Angle set off upon all the three adjoining Sides $\frac{1}{2}b - \frac{1}{2}b\sqrt{5} = ,381966011250105151795 =$ AK, AL, AY, BI, BR, BQ, CP, CO, CX, DM, DN, &c. or if it be thought more convenient to set it off from the middle Points, the Sides may be bisected by the Lines kl, hi, &c. and kL, kM, Ni, iO, lP, lQ, hI, hK, &c. made = $\frac{1}{2}b\sqrt{5} - b = ,118033988749-894848205$: Join KD, AN, AR, IC, BO, YB, SE, ZG, BT, QG, PH, VC; and the like on the opposite Sides. Draw the transverse Lines KQ, AP, LC, MO, IL, BM, QD, PN and the like on all the other Sides; by which the triangular Pyramids APBRA, IBCSI, KBQ GK, and three exactly like these, must be cut off every of the other Angles: Always taking care to continue the Lines upon the remaining Plane after any Section is made. They will amount in all to Twenty-four, by which the Body will be perfected.

The Side of the Rhomb $de = dg$, &c. = $\frac{1}{2}b\sqrt{5} - 2\sqrt{5} = ,3632712640026844294773$: its Perpendicular $gm = b\sqrt{1 - \frac{1}{5}} = ,32491969623290632615587$: The longer Diagonal $df = \frac{1}{2}b\sqrt{5} - \frac{1}{2}b = ,6180339887498948482$; The shorter $eg = \frac{1}{2}b - \frac{1}{2}b\sqrt{5} = ,3819660112501051518$: The Radius of the inscrib'd Sphere = $\frac{1}{2}b = ,5$.

The Radius of the Circumscribing Sphere = $\frac{1}{2}b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} = ,587785252292473129-1687$.

The Radius of the Sphere passing through the Obtuse Angles of the Rhomb = $\frac{1}{4}b\sqrt{15} - \frac{1}{4}b\sqrt{3} = ,535233134659634897912998$.

The Area of the Rhomb = $\frac{1}{2}b^2\sqrt{5} - b^2 = ,118033988$ &c.

The Superficies = $15b^2\sqrt{5} - 30b^2 = 3,54101966249684544614$.

The Solidity of this Body = $\frac{1}{2}b^3\sqrt{5} - 5b^3 = ,59016994374947424102$.

There remains another Geometrical Solid, comprehended under six equal Squares and thirty-two equal equilateral Triangles, Fig. 19. not so common and well known as any of the former, yet nothing less elegant, though of a far more intricate and difficult Derivation: The Notion hereof was imparted by a Friend, who understood so much of it as enabled him to draw the several Parts upon Paper or Past-board, and fold them up into a due Form: At his Request I undertook to give a more full and exact Account of all its Parts and Dimensions, and to lay down a regular and certain Method of forming or cutting it, as follows.

Let the Sides of the Cube, Fig. 18. BC, GE, FD, &c. be = $b = 1$. The first thing to be found upon which all the rest depends, is the Space $AX = BP = CH = DN$, &c. which being put = x is discovered, by the Cubick affected Equation $xxx + bxx = \frac{1}{2}bbb$,

to be = $\frac{1}{2}b\sqrt[3]{19 + 3\sqrt{33}} + \frac{1}{2}b\sqrt[3]{19 - 3\sqrt{33}} - \frac{1}{2}b = AI = ER = Gb = BS = Ga =$
Ff

Ff = Dk = Cξ = Bx = Ai = x = .419643377607080566275926282326. Or if it be judg'd more convenient to set it off from the middle Points, n, ζ, ε, θ, μ, λ, κ, ν, ρ, then will ζH, ζx, εP, εI, θN, θξ, nX, nK, κb, κi, λS, λd, μR, εa, νf, &c. be = $\frac{1}{2}b -$

$-\frac{1}{2}b\sqrt{19} + 3\sqrt{33} - \frac{1}{2}b\sqrt{19} - 3\sqrt{33} = .080356622392919433724073717674 = \frac{1}{2}b - x.$

The Square of x = .1761005643594788072547508517866, and xxx = .07389943563052-11927452491482134 = $\frac{1}{4} - xx$, and $x^4 = \frac{1}{4}x - x^3$, and $x^5 = \frac{1}{4}xx - x^4$, &c. Make Aτ,

Bp, CO, DM, Ag, Dτ, Fy, Gc, GV, ET, BW, AY = $\frac{xx}{1+x} = 4x^4 = .1240456350849-$

957952949296895, or ετ, ζp, θO, nM, nθ, νπ, εy, κc, μV, λT, εW, κY = $\frac{1}{2} - 4x^4 = .37-$

5954364915 &c. Make also Bh, Ao, Dσ, Cm, Dz, Aq, Gw, &c. = $\frac{\frac{1}{2}-x^2}{1+x-2x^2} = \frac{1+x-2x^2}{1+6x}$

= $\frac{1}{4-4x^2} = .303435090726427970756418527$, or ζh, nσ, nσ, θm, νz, κQ, μw, &c. =

= $\frac{\frac{1}{2}x}{1+x-2x^2} = \frac{1-2x^2}{4-4x^2} = .19656490927357$ &c. Lastly, make Bk, Bf, Dv, Ce, At, Aq,

AL, GZ = $\frac{x+x^2-\frac{1}{2}}{1+x-2x^2} = \frac{x}{3+4x} = .089694727820716087730744419$, or κk, νf, θv, ζe, n,

κq, εL, εZ = $\frac{1-\frac{1}{2}x-2x^2}{1+x-2x^2} = \frac{\frac{3}{2}+x}{3+4x} = .410305272179$ &c. Draw the Lines LN, PO, HM,

Xp, Ky, ga, iτ, cf, VI, RW, bT, SY, forming the Squares αβγδ, &c. Join th, σe, km, uv, qz, Zo, Qf, wL, and XQ, ol, Lg, tq, &c. Cut off the Segments pXAQfBp, ZoAIVGZ, and wLAgAw, htAqSBh; and two like these off every other Edge, in all Twenty-four: Continuing the Lines upon the Planes made by every Section.

2dly, Join Xξ, Kp, Nx, Hl, Kb, bP, Id, Xf, &c. round every Angle: Cut off the triangular Pyramids KεAbK, ξXfDξ, dIHbD; and one like these off every other Angle: in all Eight, compleating the Body by Thirty-two Sections.

The Side of the Squares and Triangles αβ, &c. = $\sqrt{2bx + 2xx - bb} = .437593286-$
00096088204305006742 = a.

The Perpendicular of the Triangle = $\sqrt{\frac{1}{2}bx + \frac{1}{2}xx - \frac{1}{4}bb} = .3789669022023414913-$
6205253888.

The Radius of the Circumscribing Sphere = $\sqrt{bx + xx - \frac{1}{4}b^2} = .587999950660337-$
533273: Radius of the Sphere Inscrib'd in the Squares = $\frac{1}{2}b = .5$. Radius of the Sphere inscrib'd in the Triangles = $\sqrt{3 \times \frac{1}{2}b + \frac{1}{2}x} = .530956351619904619798$.

Radius of the Sphere passing through the middle of every Side = $\sqrt{\frac{1}{2}bx + \frac{1}{2}xx} = .545-$
776484458866812.

The Area of the Square = $2bx + 2xx - bb = .1914878839531187470613542682-$
25 = aa.

The Area of the Triangle = $\sqrt{3 \times \frac{1}{2}bx + \frac{1}{2}xx - \frac{1}{4}bb} = .0829166860101636962952-$
48864 = $\frac{1}{4}aa\sqrt{3}$.

The whole Superficies = $6aa + 8aa\sqrt{3} = 3,802261256043950763816$.

The Solidity = $\frac{1}{3}x^3 + 2bbx + 10bx^2 - \frac{7}{3}b^3 = .661089388938395566407356539557$
= $2x + \frac{1}{3}x^2 - 1$.

Because this Body seems as advantagiously compos'd for a Set of Dials as can well be contriv'd, I have calculated the Declination and Re- } cline of all the Triangular
In- } Planes. Making one of the Six Squares the Base, placing another exactly South, and a third Horizontal, the other three will be East, West and North; and those Eight Triangles, each

each of which connect three different Squares, will then decline from the Meridian 45^d $0'00''$ and Re- } cline } from } the Zenith $35^d 15' 51''^{80287}$,
In- }

2 South } 2 North }	decline { West } East }	{ East } West }	{ d . " 12 03 53 ⁵⁶⁵¹³	{ Re- } In- }	cline { d . " 35 52 11 ⁵⁷⁴⁰
2 South } 2 North }	decline { East } West }	{ West } East }	{ 77 56 06 ⁴³⁴⁸⁷	{ Re- } In- }	cline { 35 52 11 ⁵⁷⁴⁰
2 South } 2 North }	decline { West } East }	{ East } West }	{ 54 07 48 ⁴²⁶⁰	{ Re- } In- }	cline { 09 49 35 ⁰²¹⁹
2 South } 2 North }	decline { East } West }	{ West } East }	{ 16 28 03 ²¹⁷⁶	{ Re- } In- }	cline { 54 07 48 ⁴²⁶⁰
2 South } 2 North }	decline { West } East }	{ East } West }	{ 73 31 56 ⁷⁸²⁴	{ Re- } In- }	cline { 54 07 48 ⁴²⁶⁰
2 South } 2 North }	decline { East } West }	{ West } East }	{ 35 52 11 ⁵⁷⁴⁰	{ Re- } In- }	cline { 9 49 35 ⁰²¹⁹

All the Solid Bodies hitherto mentioned being already known, as an Addition to the Geometrical Store, I shall subjoin Twelve more; none of which (I presume) have yet been expos'd to publick View, and some of them perhaps being more beautiful and elegant than any of the former. I shall begin with those that have fewest Bases, and ascend gradually to those that are more numerous.

1. A Solid of Eighteen Bases, Fig. 20. 1, 2.

Is a Body contained under Six Rhombs and Twelve Quadrilateral Bases, which (because they consist of two different Isosceles Triangles, or unequal half Rhombs joyned together) for Distinction I shall call *double Semi-rhombs*, or rather for brevity, *Semi-rhombs*. This Body (being represented in two different Views) bears some Resemblance to a Pyramid.

It is with the greatest Facility and Convenience cut out of the Cube, Fig. 1. making its Side $AD = AG = NP = NL$, &c. $= b = 1$. Bisect every Side by the Lines IF, BE, BQ, RO, OK, IM : Draw the transverse Lines AI, AE, HF, HB, HO, HM, NK, NI,
T t

NI, NB, NR, AQ, AO, forming a Rhomb upon every Base like ATSH; all six connected together in the acute Angles: Join BI, BO, IO, &c. Cut off the Triangular Pyramids BODHB, IDOAI, BDINB, and one like these off every other Edge; in all Twelve.

The longer Diagonal $AH = b\sqrt{2} = 1,41421356$ &c. The shorter $TS = \frac{1}{3}b\sqrt{2} = ,47140452079103168293$.

The Side of the Rhomb $AT =$ the longer Side of the Semi-rhomb $= \frac{1}{3}b\sqrt{5} = ,7453559924999298988$.

The longer Diagonal of the Semi-rhomb $= \frac{1}{3}b\sqrt{2} = ,84852813742385702928$. The shorter $= \frac{1}{3}b\sqrt{2} = ,4714045$ &c.

The shorter Side of the Semi-rhomb $= \frac{1}{3}b\sqrt{17} = ,2748737083745107033214$.

Radius of the Circumscribing Sphere $= \frac{1}{3}b\sqrt{3} = ,8660254$ &c. Radius of the inscribed Sphere $= \frac{1}{3}b = ,5$.

Radius of the Sphere passing through the obtuse Angles of the Rhomb and Semi-rhomb $= \frac{1}{3}b\sqrt{11} = ,55277079839256664151915$.

Radius of the Sphere passing through the other obtuse Angle of the Semi-rhomb $= \frac{1}{3}b\sqrt{3} = ,51961524227066318805823$.

⁶² The Area of the Rhomb $= \frac{1}{3}b^2 = ,333333$ &c. The Area of the Semi-rhomb $= \frac{1}{3}b^2 = ,2$. The Superficies $= \frac{2}{3}b^2 = 4,4$. The Solidity $= \frac{1}{3}bbb = ,7333333$ &c.

2. A Solid of Twenty-four Quadrilateral Bases, Fig. 21.

Comprehended under Twenty-four equal oblate Semi-rhombs like $\triangle\Gamma\Theta\Xi$, Fig. 23. so dispos'd, that the Circumscribing Sphere passes through all the three Angles $\Gamma\Delta\Xi$.

The easiest Method of cutting it is from the Cube, Fig. 22. whose Sides AB, AD, AE, &c. must be $= b\sqrt{7} - 4\sqrt{2} = 1,15894165103667743053264$. From every Angle set off BS, BT, BX, AQ, AW, AY, CV, Ch, Cd, &c. $= b\sqrt{37} - 26\sqrt{2} = ,480049349858457501439$: Or if the sides be bisected, set off from the middle both ways $= b\sqrt{\frac{1}{4}} - 38\sqrt{2} = ,099421475659881213827$. Join AT, BW, Bd, SC, TG, GS, YB, AX, Bb, CX, Ba, GT, &c. Draw the Diagonals AC, BD, BF, GC, AG, EB. Cut off the triangular Pyramids ACBXA, GABTG, CGSBC, and three like these off every other Angle; in all Twenty-four.

But it may be cut with less Waste and fewer Sections out of the Parallelepipedon, Fig. 23. whose Length ED, AB, KL $= b\sqrt{7} - 4\sqrt{2} = 1,158941651$ &c. Height DM, BL, AK $= b = 1$. Breadth AE, BD, LM $= \frac{2}{3}b + \frac{4}{3}b\sqrt{2} = 1,0938363213560543136$. Bisect every Side by the Lines GF, IH, PN, SI, NT, RF.

1. Make Gd, Fb, $R_\chi = b - \frac{1}{3}b\sqrt{2} = ,2928932188134524756$, and Be, Af, $M_\downarrow = \frac{2}{3}b - \frac{1}{3}b\sqrt{2} = ,453081839321978432$. Draw the Parallels db, fe: Join eb, $\downarrow_\chi$: Cut off the Prism dbBefAd, and another like it (under the Triangle $\downarrow_\chi M$) off the opposite Edge, viz. Two.

2. Make IV $= IQ = \frac{1}{4}b\sqrt{\frac{9}{17}} - \frac{3}{17}b\sqrt{2} = ,21918699844582207$; and Fa, GW $= \frac{1}{4}b - \frac{3}{17}b\sqrt{2} = ,3786796564403574268$; and Ll, Kq $= \frac{7}{17}b\sqrt{2} - \frac{4}{17}b = ,457797352034982033$. Draw the Lines QW, Va, al, Vl, Qq. Cut off the triangular Pyramids VaBlV, QWAqQ, and two more like these, off the opposite Angles; in all Four.

3. Make FX, GO, Rm $= \frac{6}{7}b\sqrt{2} - \frac{1}{7}b = ,140754482034081471$, and HZ, HY, Sg, Sh $= b\sqrt{\frac{1}{17}} - \frac{4}{17}b\sqrt{2} = ,505449465124424$. Draw the Lines XY, OZ, which complete the Semi-rhomb $\triangle\Gamma\Theta\Xi$. Set off Di, Kr, Lo $= \frac{8}{7}b - \frac{1}{7}b\sqrt{2} = ,486257988898$ -

2058702: Join Xi, gr, ho, om: Cut off the Pyramids YXDi, homLh, and twomore like these, off the opposite Angles under the Triangles OEZ, gKr; in all Four.

4. Make Ik, It = $\frac{1}{7}b\sqrt{\frac{343}{17}} - \frac{1}{17}\sqrt{2} = ,377052654130470613$, and Hn, Hu, = $\frac{1}{7}b\sqrt{\frac{735}{17}} - \frac{4}{17}\sqrt{2} = ,215118189020668$; and Np, Pw, Tf = $\frac{1}{7}b = ,14285714285714$ &c. Join kn, tu, pf, kp, tw. Cut off the Segments kpBfDnk, and tuEAWr, and two more like these, off the opposite Edges; in all Four.

5. Make Is, In, = $\frac{1}{14}b\sqrt{\frac{116}{17}} + \frac{2}{17}\sqrt{2} = ,1954722392264914829$, and Fz, Gl, Rμ, = $\frac{1}{7}b\sqrt{2} - \frac{1}{14}b = ,1306019374818707212$, and Sθ, Sy = $\frac{1}{7}b\sqrt{\frac{432}{17}} - \frac{2}{17}\sqrt{2} = ,34351496001432290325$. Draw the Lines ex, xμ, εθ, ηλ, ηy. Cut off the Segments εBxμLθε, ηλAKyn, and two more like these, off the opposite Edges; in all Four.

6. Make Iτ, Iv = $\frac{1}{7}b\sqrt{\frac{79}{17}} - \frac{5}{17}\sqrt{2} = ,161934505110101773057$; and Fv, Gρ, Rz = $\frac{1}{7}b\sqrt{2} - \frac{1}{7}b = ,385618083164126731735$, and Sσ, Sπ, Hc, Hx = $\frac{1}{7}b\sqrt{\frac{12}{17}} + \frac{2}{17}\sqrt{2} = ,195472239$ &c. and Rφ, Fω, Gξ = $b\sqrt{2} - \frac{2}{7}b = ,2475468957064283821$. Draw the Lines τv, τσ, υφ, νρ, ντ, cω, ωz, ξx. Cut off the Segments τBυφLστ, εAvπKA, and two like these, off the opposite Edges; in all Four: So the Body will be form'd by 22 Sections, observing after each to continue the Lines.

The longer Diagonal of the Semi-rhomb rε = $\frac{1}{7}b\sqrt{7} - 4\sqrt{2} = ,5794708255183387152663206185$.

The shorter Δθ = $\frac{1}{7}b - \frac{2}{17}b\sqrt{2} = ,5194341384744388972$: The longer Part of it extending from the acuter Angle to the other Diagonal = $\frac{2}{7}b - b\sqrt{2} = ,335786437626904951198311$. The shorter Part of it = $\frac{1}{7}b\sqrt{2} - \frac{2}{17}b = ,1836477008475339460$.

Radius of the Circle circumscribing the three Angles of the Semi-rhomb = $b - \frac{1}{7}b\sqrt{2} = ,2928932188134524756$. The remaining Part of the Diagonal = $\frac{3}{7}b - \frac{1}{7}b\sqrt{2} = ,2265409196609864216$.

The longer Side Δr = $b\sqrt{\frac{1}{17}} - \frac{1}{17}\sqrt{2} = ,443507768929632$.

The shorter rθ = $\frac{1}{7}b\sqrt{39} - \frac{4}{17}\sqrt{5} = ,3430351110794807$.

Radius of the circumscribing Sphere = $\frac{1}{7}b\sqrt{7} - 4\sqrt{2} = ,57947$ &c.

Radius of the inscrib'd Sphere = $\frac{1}{7}b = ,5$.

Radius of the Sphere passing thro' the obtuse Angle of the Semi-rhomb = $\frac{1}{14}b\sqrt{93} - 24\sqrt{2} = ,54892694252498213939834$.

The Area of the Semi-rhomb = $\frac{1}{14}b^2\sqrt{\frac{407}{17}} - 1192\sqrt{2} = ,15049846451208657$.

The whole Superficies = $\frac{4}{7}bb\sqrt{\frac{407}{17}} - 1192\sqrt{2} = 3,611963148290078$.

The Solidity of the Body = $\frac{1}{7}b^3\sqrt{\frac{407}{17}} - 1192\sqrt{2} = ,60199385804834627$.

3. A Solid of Twenty-four Isosceles Triangles, Fig. 24. 1, 2.

Is compounded of six square Pyramids, each of whose Sides are four Isosceles Triangles, and a Cube whose Bases are the same with the Bases of the Pyramids.

It may be cut out of the Cube, Fig. 25. whose Sides DC, FM, GE, &c. = $\frac{1}{4}b\sqrt{6} = 1,224744871391589$ &c. Bisect every Side by the Lines IH, OP, IK, LN, LM, RO. Set off Ob, Oq, Pe, Pd, HT, HS, IV, IW, KI, Km, Ng, Nf, LZ, La, MY, MX, Rh, Rk = $\frac{1}{4}b\sqrt{6} - \frac{1}{4}b\sqrt{3} = ,179359733803575201160817$. Draw the Parallels dq, eb, VS, WT, Vm, WI, gz, fa, ZY, aX, hb, kq. Join Ib, le, VO, OS, Va, Oa, &c. Cut off the Prisms OAVmGR, IAbhGK, OAafBP, bALNBe, and two like these off every other Edge, finishing the Body by Twenty-four Sections.

But it may also be cut by four Sections fewer, and with less Waste, out of the Parallelipedon, *Fig. 26.* whose Breadth and Height NE, KC, MN, CD = $b = 1$; the Length ED, AC, MK = $b\sqrt{5} - 2\sqrt{3} = 1,239313674927475902315$. Bisect all the Sides with the Lines, HF, BG, IP, OH, BQ, LI.

1. Make HS, FR, IV, LT, Pz, Od = $\frac{1}{2}b\sqrt{3} - \frac{1}{2}b = ,077350269189625764509$, and HX, FW, IZ, LY, Og, Pe = $\frac{1}{2}b\sqrt{3} - \frac{1}{2}b = ,3660254037844386467637$. Draw the Parallels SR, Xw, VT, ZY. Join XV, Zd, gz, Se. Cut off the Prisms XAVTCWX, ZdMKYZ, SRDEEs, and another like these, whose end is the Triangle gNz; in all Four.

2dly, Make Bm = Bk = Qp = Qf = Gb = Ga = $\frac{1}{2}b\sqrt{\frac{11}{13} - \frac{6}{13}\sqrt{3}} = ,1081038633913773875$; and Hn = Fh = Iq = Lw = $3b - \frac{1}{2}b\sqrt{3} = ,4019237886466840597$, and Ir = Lu = Ox = $5b\sqrt{3} - 8b = ,1602540378443864676$. Draw nk, nr, rk, mh, mu, pq, qx, fw. Cut off the Pyramids nkArn, hmuCh, pqxMp, fwkf, and Four more like these, off the opposite Angles; in all Eight.

3dly, Make Gt = Gs = By = Bz = $\frac{1}{2}b\sqrt{\frac{11}{13} - \frac{6}{13}\sqrt{3}} = ,5405193169568869375$. Draw mt, ky, py, fZ, and mZ, Ze, gX. Cut off the Segments tmAZer, kyCDg, fMgXZ, ypKCWy, and Four more like these off the opposite Angles; in all Eight: By these Twenty Sections the Body may be completely form'd.

The Base of the Triangle $\beta\gamma = b\sqrt{\frac{1}{3}} - \frac{1}{2}\sqrt{3} = ,715518083829762571$.

The Side of the Triangle $\alpha\beta = \alpha\gamma = b\sqrt{\frac{7}{3}} - \frac{1}{2}\sqrt{3} = ,56971354157774615355$.

Radius of the Circle circumscribing the Triangle = $a\theta = \frac{1}{2}b\sqrt{3} - \frac{1}{2}b = ,3660254037844386467637$.

The Perpendicular $\alpha x = \frac{1}{2}b\sqrt{3} - b = ,4433756729740644112737$.

Radius of the inscrib'd Sphere = $\frac{1}{2}b = ,5$.

Radius of the circumscribing Sphere = $b\sqrt{\frac{1}{3}} - \frac{1}{2}\sqrt{3} = ,6196568374637379511575$.

The Area of the Triangle = $\frac{1}{2}b^2\sqrt{305 - 174\sqrt{3}} = ,158621655971567007247367255$.

The whole Superficies = $2bb\sqrt{305 - 174\sqrt{3}} = 3,806919743317608173936814112$.

The Solidity of the Body = $\frac{1}{3}bbb\sqrt{305 - 174\sqrt{3}} = ,634486623886268028989469019$.

4. A Solid of Thirty-two Triangles, *Fig. 27. 1, 2.*

Consisting of six square Pyramids, the exterior Surface of each of which, being four Isosceles Triangles, whose Bases compose Eight equilateral Triangles.

It may be cut out of the Cube, *Fig. 28.* whose Sides DC = BC = BF, &c. are = $\frac{1}{2}b\sqrt{6} = 1,2247448713915890491$. Cross every Base with Diagonals, as BD, AC, AE, GD, GB, AF, &c.

1. From every Angle set off twice upon all the Sides $\frac{1}{2}b\sqrt{3} - \frac{1}{2}\sqrt{6} = ,25365296808864412221$, viz. AY and YK, AV and VH, Ae and el, BL and LO, BX and XP, Bw and wa, &c. Draw the Lines AP, AR, Ar, Am, Ah, Aa, BS, BH, BI, Bg, CQ, CO, DT, DK, DI, Dn, EQ, Ec, Gq, GH, GK, Gb, FO, FC. Cut off the Pyramids GDAKG, BDIAB, GBHAG, and three more like these off every of the other Angles; in all Twenty four.

2dly, Draw the Lines LM, LN, MN. Yw, YZ, Vu, Vp, Xf, tl, de, ef, kw. Cut off the triangular Pyramids NLMAN, ZYWBZ, pVuDp, defGd, and Four more off the opposite Angles; in all Eight.

But

But it may be cut with fewer Sections and less Waste out of the Parallelepipedon, Fig. 29. whose Length CE, AD, MP = $\frac{1}{4}b\sqrt{6} = 1,22474487$ &c. Breadth DE, AC, ML, = $\frac{1}{4}b\sqrt{2} = 1,0606601717798212866$: Height LC, MA, PD, = $b = 1$. Bisect every Side with the Lines BH, FG, FW, OK, OQ, BN.

1. Make FR, GS, Wx = $\frac{1}{4}b\sqrt{2} = ,3535533905932737622$. Draw the Parallel RS: Join RO, xK: Cut off the Prism ARSDQO, and another like it, whose end is the Triangle xLK, i. e. Two.

2. Make FZ = Gw = wZ = $\frac{1}{4}b\sqrt{2} = ,1767766952966368811$, and Kl = O_γ = Q_λ = $\frac{2}{4}b - \frac{1}{4}b\sqrt{2} = ,33981137949147963240$. Draw the Parallels WZ, γλ: Join Zl, γλ: Cut off the Prisms wECIZ, γλPMζγ, viz. Two.

3. Make BY, BX, CT, EV, Hd, Hm, N_σ, N_τ, Af, D_κ = $\frac{1}{4}b\sqrt{6} = ,10206207261596575409$. Draw Rd, Sm, Rx, Rf, f_τ, S_κ, xσ. Cut off the Segments RdCLx, xM_τ/ARx, σPDSxσ, SmES, viz. Four exactly alike.

4. Make Oμ, Qξ = $\frac{1}{4}b - \frac{1}{4}b\sqrt{2} = ,21966991411008335670$; and K_ε = $\frac{1}{4}b - \frac{1}{4}b\sqrt{2} = ,459952844872869908101$. Draw XV, YT, completing the Triangle xφ. Join Yμ, με, Xξ. Cut off the Segments TYAμεCT, ξDXVED, and two more like these, off the opposite Edges; in all Four.

5. Make Fa, Gβ, Wδ = $\frac{1}{4}b\sqrt{2} - \frac{1}{4}b = ,4874368670764581677$. Draw the Parallel αβ: Join αK, Oδ. Cut off the thin Prism KaCEβα, and another like it, whose end is the Triangle OMδ, i. e. Two.

6. Make Hf, Hb, Nr, Nθ = $\frac{1}{4}b\sqrt{3} - \frac{1}{4}b\sqrt{6} = ,18661306197884712816$; and Fi, Ga, Wξ = $\frac{1}{4}b - \frac{1}{4}b\sqrt{2} = ,0428932188134524756$; and Oλ, QΔ, Ky = $\frac{1}{4}b\sqrt{2} - \frac{1}{4}b = ,310660171779821286601$. Draw ib, iy, fa, θλ, λξ, γΔ. Cut off the two triangular Pyramids biyCb, faEf, and two more like these, off the opposite Angles, viz. θMAξ, γPΔ; in all Four.

7. Make Bv = Bt = P_ρ = M_ς = $\frac{1}{4}b\sqrt{6} - \frac{1}{4}b\sqrt{3} = ,25665739499118464823$; and Fq = Gu = W_φ = $\frac{1}{4}b - b\sqrt{2} = ,0857864376269049212$. Draw the Lines tv, t_ρ, vq, qφ, ςv. Cut off the two Segments ςvAqλM_ς, stuDP_ρ, and two more like these, off the opposite Edges; in all Four.

8. Make Br, Bn = $\frac{1}{4}b\sqrt{3} + \frac{1}{4}b\sqrt{6} = ,39073720721077863634$; and Ge, Fo = $\frac{1}{4}b\sqrt{2} - \frac{1}{4}b = ,07650484370467680312$; and Oη, Q_π = $\frac{1}{4}b - \frac{1}{4}b\sqrt{2} = ,21966991411008335670$. Draw re, r_π, no, nη, n_ο. Cut off the Pyramids n_οoAn, er_πDe, and two more like these, from the opposite Angles; in all Four.

9. Make Bc = Bp = $\frac{1}{4}b\sqrt{6} - \frac{1}{4}b\sqrt{3} = ,3762305508602347824$; and H_ω = Hh = $\frac{1}{4}b\sqrt{3} - \frac{1}{4}b\sqrt{6} = ,271164051341728502234$; and Kz = Oθ = Q_ν = $\frac{1}{4}b\sqrt{2} - \frac{1}{4}b = ,0909902576697319299$. Draw ch, c_ν, p_ω, p_κ, xz. Cut off the Segments ωpAxzCω, hcvDEh, and two more like these, off the opposite Edges; in all Four: So the Work will be dispatch'd at thirty Sections.

The Side of the equilateral and Base of the Ilosceles Triangle = xφ = φ + $\frac{1}{4}b\sqrt{6} = ,61237243569579452455$.

The Perpendicular of the Equilateral Triangle = $\frac{1}{4}b\sqrt{2} = ,5303300858899106433$:

The Side of the Ilosceles Δ $\frac{1}{4}b\sqrt{\frac{1}{2}} - \frac{1}{4}b\sqrt{2} = ,468689571155673738765$. Its Perpendicular = $\frac{1}{4}b\sqrt{\frac{7}{2}} - \frac{1}{4}b\sqrt{2} = ,35485196083731784375$.

Radius of the circumscribing Sphere = $\frac{1}{4}b\sqrt{6} = ,61237$ &c.

Radius of the Sphere inscrib'd in the Equilateral Triangles = $\frac{1}{4}b = ,5$.

Radius of the Sphere inscrib'd in the Ilosceles Triangles = $\frac{1}{4}b\sqrt{\frac{1}{3}} + \frac{1}{4}b\sqrt{2} = ,528389358642883532505$.

The Area of the Equilateral Triangle = $\frac{1}{2}b^2\sqrt{3}$. Of all the Eight = $\frac{1}{2}b^2\sqrt{3} = 1,299\ 03.81056766579701455$.

The Area of the Isosceles Triangle = $\frac{1}{2}b\sqrt{7-4\sqrt{2}} = 1,08650779784688509112435$.

The whole Superficies = $\frac{1}{2}b^2\sqrt{3} + \frac{2}{4}b^2\sqrt{7-4\sqrt{2}} = 3,906656820509182188844$.

The Solidity of the Body = $\frac{1}{12}bbb\sqrt{3} + \frac{1}{12}bbb\sqrt{6} = 6,675785677717955555103$.

5. A Solid of Thirty-six Bases, Fig. 30.

Comprehended under twelve Rhombs and twenty-four double Semi-rhomb. For the forming it prepare a Parallelepipedon, Fig. 31. whose Length DE, AB, HG = $\frac{1}{2}b\sqrt{2} = 1,0606601717798212866$. Breadth and Height GF, AD, FE, HA = $b = 1$. Bisect every Side with the Lines MI, LK, OM, NP, NR, QL.

1. Make Kd, KZ, LY, LZ, Qμ, Qξ = $\frac{1}{2}b\sqrt{2} = 3,535533905932737622$. Draw the Parallels YZ ζd, Yξ, ζμ. Join YM, YN, ζI, ζR. Cut off the Prisms YZEPNBY, ζADARζ, ξYBMOGξ, μζIAHζ, and Four more like these, off the opposite Edges; in all Eight.

2. Make Mk, Mβ, IX, If, Nu, Nz, Rθ, Rm, Pπ, P↓, Oρ, Oχ = $\frac{1}{4}b = .25$. Join βK, β↓, Lk, Lz, zk, Lf, Lθ, Qu, uχ, Qm, XK, ππ: Cut off the triangular Pyramids kLzBk, Kβ↓EK, θLFAθ, QμχGQ, and Four more like these, off the opposite Angles; in all Eight.

3. Make MS, Mγ, IW Ih, No, Nx, Rν, Rc = $\frac{1}{8}b = .0833333$ &c. and MT, Ml, Ie, In, Nτ, Nq, Rν, Rt = $\frac{1}{8}b = .0833333$ &c. and MV, Me, Ib, Iv, Np, Nσ, Rr, Rλ = $\frac{1}{8}b = .0833333$ &c. and Ma, Mδ, Ia, Ig, Nf, Ny, Ri, Rκ = $\frac{1}{8}b = .0833333$ &c. Draw the Lines γn, Se, Th, Wl, cτ, uq, xt, oν forming the Rhombs ΔΓΞΘ, &c. Join ab, aV, pi, fr, fs, qV, pT, &c. Cut off the Segments fBSeAif, xBabAtx, qAaVq, piAhTp, and Four more like these, off every of the other three longer Edges; in all Sixteen: Forming the Body by Thirty-two Sections.

The longer Diagonal of the Rhomb ΔΞ = $\frac{1}{2}b\sqrt{2} = 7,071067811865475244$.

The shorter Diagonal of the Rhomb and of the Semi-rhomb = $r\theta = \frac{1}{4}b = 3,3333333$ &c.

The Side of the Rhomb, and longer Side of the Semi-rhomb = $\Delta\Gamma = \frac{1}{4}b\sqrt{22} = 3,90867979985285796213$.

The longer Diagonal of the Semi-rhomb = $\frac{1}{2}b\sqrt{2} = 5,303300858899106433$. The shorter Part of it = $\frac{1}{4}b\sqrt{2} = 1,76776695$ &c. The shorter Side of the Semi-rhomb = $\frac{1}{4}b\sqrt{34} = 2,429563289518875196197$.

The Radius of the Circumscribing Sphere = $\frac{1}{4}b\sqrt{6} = 6,1237243569$ &c.

The Radius of the inscrib'd Sphere = $\frac{1}{8}b = .5$.

The Radius of the Sphere passing through the obtuse Angles of the Rhomb and Semi-rhomb = $\frac{1}{2}b\sqrt{10} = 5,270462766947298886665$.

The Radius of the Sphere passing through the other obtuse Angle of the Semi-rhomb = $\frac{1}{2}b\sqrt{2} = 5,303300858899106433$.

The Area of the Rhomb = $\frac{1}{2}b^2\sqrt{2} = 1,1785113019775792073$.

The Area of the Semi-rhomb = $\frac{1}{4}b^2\sqrt{2} = 1,08838834764831844055$.

The Superficies = $\frac{1}{2}b^2\sqrt{2} = 3,535533905932737622$.

The Solidity = $\frac{1}{12}b^3\sqrt{2} = 5,89255650988789603665$.

6. A Solid

6. A Solid of Forty-eight Bases, Fig. 32.

Comprehended under Twenty-four Rhombs, and Twenty-four Semi-rhombs, which compose Six Octangular Figures like a b h c d e f g, Sch. 32.

It may most commodiously be cut out of a Cube, Fig. 33, whose Sides DC, LB, KE, &c. are $= \frac{1}{2}b\sqrt{6} = 1,0886621079036347103$. Bisect every Side with the Lines FG, HI, IQ, OP, ON, MF.

1. Set off from every middle Point on both sides it $\frac{1}{2}b\sqrt{6} = ,40824829046386301637 = GR = GX = IS = IW = FT = FY = HV = HZ = Ow = Oy = Pa = Pz = Qk, = Ql = M\zeta = M\beta = N\gamma = N\epsilon$: In like manner set off $\frac{1}{3}b\sqrt{6} = ,068041381743977-169395 = In = Ix = Fr = Fa = Oo, \&c.$ Draw the Lines YZ, WX, ST, RV, Ia, Sy, $\zeta\epsilon, kw, zW, Ty, w\beta, Y\gamma, \&c.$ Join Sr, So, oT, yr, &c. Cut off the triangular Pyramids rASyr, SoATS, "ATy", and three more such off every Angle; in all twenty-four, making the Planes of the Rhombs.

2. Set off from every middle Point both ways $\frac{1}{3}b\sqrt{6} = ,3628873693012115701 = Gp, Gf, Fu, Fq, Hr, Ha, le, In, Pa, Ph, Qm, Ox, Oc, Mg, Mb, Nf, Nd.$ Draw the Parallels qp, uf, nt, ea, x δ , ch, μn , me, xd, cf, gq, bu. Join ql, Oe, lx, eF, Oq, xF, &c. Cut off the Prisms eAONDae, xAIHDdx, qAOPBpq, xAFGB δ x, and two more such off every Edge; in all twenty-four, being the Planes of the Semi-rhombs.

The longer Diagonal of the Rhomb $= \frac{1}{2}b\sqrt{3} = ,5773502691896257645$.

The shorter Diagonal $= \frac{1}{2}b\sqrt{2} = ,3535533905932737622$.

The longer Diagonal of the Semi-rhomb $= \frac{1}{2}b\sqrt{15} = ,43033148291193520946438$.

Its longer Part extending to the shorter Diagonal $= \frac{1}{3}b\sqrt{15} = ,3227486121839514-070982$. The shorter Part $= \frac{1}{3}b\sqrt{15} = ,10758287072798380237$.

Its longer Part extending to the Perpendicular from the Center $= \frac{1}{3}b\sqrt{15} = ,2581988-8974716112567862$ The shorter Part $= \frac{1}{3}b\sqrt{15} = ,172132593164774083786$.

The shorter Diagonal of the Semi-rhomb $= \frac{1}{2}b\sqrt{6} = ,204124145231931508187$.

The Side of the Rhomb, and longer Side of the Semi-rhomb $= \frac{1}{2}b\sqrt{66} = ,338501-60019316501501915$. The shorter Side of the Semi-rhomb $= \frac{1}{3}b\sqrt{114} = \frac{1}{3}b\sqrt{\frac{1}{2}} = ,1489417402050501153446$.

Radius of the Sphere inscrib'd in the Rhombs $= \frac{1}{2}b = ,5$.

Radius of the circumscribing Sphere $= \frac{1}{2}b\sqrt{3} = ,57735026918962576450914878$.

Radius of the Sphere inscrib'd in the Semi-rhombs $= \frac{1}{3}b\sqrt{15} = ,516397779494322-251357$.

Radius of the Sphere passing through the obtuse Angles of the Rhombs and Semi-rhombs $= \frac{1}{2}b\sqrt{2} = ,5303300858899106433$.

Radius of the Sphere passing through the other obtuse Angle of the Semi-rhomb $= \frac{1}{2}b\sqrt{6} = ,544331053951817355156$.

The Area of the Rhomb $= \frac{1}{2}b^2\sqrt{6} = ,102062072615965754094$.

The Area of the Semi-rhomb $= \frac{1}{2}b^2\sqrt{10} = ,043920523057894157388875$.

The Superficies $= b^2\sqrt{6} + \frac{1}{2}b^2\sqrt{10} = 3,503582296172637875535678$.

The Solidity $= \frac{1}{3}b^3\sqrt{6} = ,589691975114468801426$.

The remaining fix solid Bodies, being much more elegant and beautiful than the former, and necessarily requiring a far more intricate and difficult Calculation, though the Prosecution thereof in Surds, in several of them, prov'd almost insupportably tedious where they amount to Quadrinomials, as they do in all the three first (so that it might have been

been carried on in Numbers with greater Facility and Expedition to 25 or 30 Figures) yet have I at length, with Labour and Difficulty enough, wrestled through it. To evidence the Truth of this Assertion, and illustrate the Method of these uncommon Operations, a Specimen hereof shall at the latter end be subjoin'd in an Example or two.

7. *A Solid of Sixty Isosceles Triangles, Fig. 34.*

Comprehended under Twelve Pentagonal Figures like that a b c d e, each consisting of Five Isosceles Triangles whose Bases are ab, bc, cd, de, ea. This Body approaches the nearest of any to the Regular, differing only in one small Circumstance scarce discoverable by a critical Eye. The most convenient Method of cutting this Body is from the Cube, Fig. 35. whose Sides EG, CP, NL, &c. are $= b\sqrt{\frac{1}{2}} + \frac{2}{3}\sqrt{5} - \sqrt{\frac{1}{2}} + \frac{2}{3}\sqrt{5} =$
 $= ,10125407943826174215820092$. Bisect every Base with the entire Lines DF, BO, IK, and the prickt Lines BH, FM, QI, alternately plac'd.

First, From the Angles set off upon every Side AS, AR, AT, GX, Ca, Nx, &c. $=$
 $= \frac{1}{2}b\sqrt{\frac{1}{2}} + \frac{1}{2}\sqrt{5} - \frac{1}{2}\sqrt{70\frac{3}{2}} + \frac{3}{2}\sqrt{5} = ,08042987684571127459495$; or rather from the middle prickt Lines set off both ways BT, HX, FS, IK, Mx, Qa, &c.
 $= \frac{1}{2}b\sqrt{\frac{1}{2}} + \frac{4}{3}\sqrt{5} - 3\sqrt{126\frac{3}{2}} + \frac{8}{3}\sqrt{5} = ,42584052034759743619605$.
 Draw the Parallels TX, Sx, Ra, &c. Join TI, SB, RF: Cut off the Prisms TAIKGXT, RAFDCaR, SABONxS, and one like these off every Edge; in all Twelve.

Secondly, From every of the prickt middle Lines set off both Ways
 $\frac{1}{2}b\sqrt{\frac{1}{2}} - \frac{1}{2}\sqrt{5} - \sqrt{4470} - 1986\sqrt{5} = ,37830461824652536199809 = BV = HZ$
 $= Ie = Q\beta$, &c. and $\frac{1}{2}b\sqrt{\frac{1}{2}} - \frac{2}{3}\sqrt{5} - \frac{1}{2}\sqrt{627510} - 273954\sqrt{5} = BW, He, Ib,$
 $Q\lambda$, &c. $= ,008451550211815891340806$; or rather because this Distance is too small, make AW, Ab, Ca, Gs, &c. $= \frac{1}{2}b\sqrt{185} - 81\sqrt{5} + \sqrt{47910} - 21426\sqrt{5} = ,49781884-$
 6979492814950199 . Draw the transverse Lines Vx, WZ, ex, bx, &c. From the entire middle Lines set off $\frac{1}{2}b\sqrt{\frac{1}{2}} + \frac{1}{2}\sqrt{5} - \frac{1}{2}\sqrt{178350} + 79530\sqrt{5} = Fc = D\gamma = If =$
 $= K\zeta = Bh$, &c. $= ,400431063958683853456687$; and $Fo = D\mu = Id = K\delta$, &c.
 $= \frac{1}{2}b\sqrt{\frac{1}{2}} - \frac{1}{2}\sqrt{5} - \frac{1}{2}\sqrt{83550} - 36870\sqrt{5} = ,0945289513968154287567976$.
 Draw the Lines oy, cμ, fδ, dζ, &c. Join ob, Wd, ce, fv. Cut off the Segments WAd, GZW, VAF, GxV, oAb, Cyo, cAex, Cμc, and two such off every other Edge; in all Twenty-four.

Thirdly, Make Fr, Bt, Iu $= \frac{1}{2}b\sqrt{\frac{1}{2}} - \frac{2}{3}\sqrt{5} - \frac{1}{2}\sqrt{43350} - 8670\sqrt{5} = ,29921741-$
 746179471821489 , and Fm, Bf, Iw $= \frac{1}{2}b\sqrt{\frac{1}{2}} - \frac{3}{2}\sqrt{5} - \frac{1}{2}\sqrt{1212} + \frac{2}{3}\sqrt{5} =$
 $,33602998601351634201492$; and Bk, Fq, Il, $= \frac{1}{2}b\sqrt{\frac{1}{2}} + \frac{2}{3}\sqrt{5} - \frac{1}{2}\sqrt{461100} + 205656\sqrt{5}$
 $= ,14164067444512706956754$. Join fr, rl, lf, mu, uk, km, qw, wt, tq. Cut off the triangular Pyramids fAlf, muAkm, wAqt, and three such off every other Angle; in all Twenty-four.

The Base of the Triangles $= b\sqrt{\frac{1}{2}} - \frac{1}{2}\sqrt{5} - \sqrt{\frac{1}{2}} - \frac{2}{3}\sqrt{5} = ,38675616846034061-$
 582810246 .

The Perpendicular of the Triangles $= \frac{1}{2}b\sqrt{\frac{1}{2}} + \frac{2}{3}\sqrt{5} - \frac{1}{2}b\sqrt{5} - \frac{1}{2}b = ,288490641-$
 4946655915829869635 .

The Side of the Triangles $= b\sqrt{\frac{1}{2}} - \frac{1}{2}\sqrt{\frac{1}{2}} + \frac{2}{3}\sqrt{5} = ,34730668535193467323682$.

Radius of the circumscribing Sphere $= b\sqrt{\frac{1}{2}} - \frac{1}{2}\sqrt{5} - \frac{1}{2}\sqrt{30} + 6\sqrt{5} = ,541945383-$
 348164267894171913147 .

Radius

Radius of the Sphere passing through the middle of the Base of each Triangle

$$= \frac{1}{3}b\sqrt{\frac{1}{2}} + \frac{2}{3}\sqrt{5} - \frac{1}{3}\sqrt{150} + 66\sqrt{5} = 5062703971913087107910046.$$

Radius of the inscrib'd Sphere = $\frac{1}{3}b = .5$.

$$\text{The Area of the Triangle} = \frac{1}{3}b^2\sqrt{\frac{1}{2}} - \frac{6}{3}\sqrt{5} - 3\sqrt{113910} - 42654\sqrt{5} = 5055787767570282817462699193445.$$

$$\text{The whole Superficies} = 5b^2\sqrt{\frac{1}{2}} - \frac{6}{3}\sqrt{5} - 3\sqrt{113910} - 42654\sqrt{5} \text{ equal to } 3,3472660542169690477619516067.$$

$$\text{The Solidity of the Body} = \frac{1}{3}b^3\sqrt{\frac{1}{2}} - \frac{6}{3}\sqrt{5} - 3\sqrt{113910} - 42654\sqrt{5} = 555787767570282817462699193445.$$

8. A Solid of Sixty double Semi-rhombs, Fig. 36. 1, 2.

This Body, though contain'd under the same Number of Bases with the former, yet differs vastly from it, both in the Form, and in the Method of Calculation; agreeing only in the Difficulty and Intricacy thereof: Yet this much exceeds, though not in the Nature or Degree of the Surds (which here also are Quadrinomials under double radical Signs) but in the Length and Greatness of the Numbers of which they are compos'd. This render'd the Operation intolerably tedious, since ere it could be accomplish'd, the Figures would oft unavoidably arise to fifty Places or more, and could not be reduc'd to a moderate Length, except by several successive Divisions and Extractions of Roots: yet after all, several of them are not reducible so low as the former. This Body consists of twelve such Decagonal Figures as that a b c d e f g h i k in the middle of Sch. 36, or twenty like o k l m n b a o.

It is most commodiously cut out of the Cube, Fig. 37. whose Sides AD, DC, AE, CF, GF, &c. are = $b\sqrt{15} - 2\sqrt{5} - 4\sqrt{10} - 2\sqrt{5} = 1,05985848504451316673009586$.

Bisect the Sides with the Lines IH, PO, OR, HM, LN, NA.

1st. Make PQ, OS, NT, Ad, HY, MZ, &c. = $\frac{1}{3}b\sqrt{140} - 55\sqrt{5} - 2\sqrt{7025} - 3110\sqrt{5} = 21466055251134408771409$, and HY, lb, NV, LX, OW, RU = $\frac{1}{3}b\sqrt{2300} - 249\sqrt{5} - 2\sqrt{1188365} - 202598\sqrt{5} = 1396901662925889743697$. Draw the Parallels QS, ZY, Td, ba, XV, WU, &c. Join VS, YW, aT, &c. Cut off the Prisms QSBVXAQ, baBTdCb, and one such off every Edge: in all Twelve.

2. Make Of, Oh, Pk, Pg, Hz, Hs, Ma, Mb, Nr, Ny, Ax, Aw = $\frac{1}{3}b\sqrt{95} - 40\sqrt{5} - 4\sqrt{650} - 290\sqrt{5} = 385016131526076456697$, and Nm, Ln, Hv, Ia = $\frac{1}{3}b\sqrt{455} + 20\sqrt{5} - 4\sqrt{11930} + 1618\sqrt{5} = 48876246451052509141409$, and Hx, Ix, Li, No = $\frac{1}{3}b\sqrt{365} - 146\sqrt{5} - 2\sqrt{59930} - 26638\sqrt{5} = 2700124354964034676984$. Draw the Lines fg, kh, az, eβ, rw, yx, lm, no, xλ, vξ, oh, xy, fm, &c. Cut off the Segments khBonAk, lmB/gAl, and two more like these off every of the other Edges; in all Twenty-four.

3. Make Hi, Mq = $\frac{1}{3}b\sqrt{600} + 255\sqrt{5} - 2\sqrt{171025} + 76390\sqrt{5} = 46331999649$. 19487926247; and Hu, MK = $\frac{1}{3}b\sqrt{300} - 105\sqrt{5} - 2\sqrt{34625} - 15010\sqrt{5} = 10937$. 5014507064008649453; and Oc, Rp = $\frac{1}{3}b\sqrt{\frac{1}{2}} + \frac{3}{3}\sqrt{5} - \sqrt{2520} + 1538\sqrt{5} = 4780560760300373329721$; and Ot, Rf = $\frac{1}{3}b\sqrt{\frac{1}{2}} - \frac{1}{3}\sqrt{5} - 4\sqrt{125} + 38\sqrt{5} = 03205927999627269711098$: Or because this Extent is too small, make Br, Gf = $\frac{1}{3}b\sqrt{\frac{1}{2}} - \frac{6}{3}\sqrt{5} - \sqrt{290} + 38\sqrt{5} = 49786986252598388625407$. Draw the Lines Ki, cf, qu, tp, tu, ci. Cut off the Segments ptBuqGp, KiBcf/GK, and two like these off

off every other of the Edges; in all Twenty-four; perfecting the Body by Sixty Sections.

The shorter Diagonal of the Semi-rhomb $= b\sqrt{\frac{1}{5}} - \frac{1}{5}\sqrt{5} - \sqrt{50} - 22\sqrt{5} = ,327514283511240623860835.$

The longer Diagonal $= \frac{4}{11}b\sqrt{7765} - 482\sqrt{5} - \frac{449b - 37b\sqrt{5}}{362} = ,338311174575652-6222550172912.$

The longer Part of it, extending from the acute Angle to its Interfection with the shorter Diagonal $= \frac{1}{4}b\sqrt{\frac{185}{5}} - \frac{1}{5}\sqrt{5} - 2b = ,2388840150249961735062634218.$

The shorter Part $= \frac{275b - 37b\sqrt{5}}{362} - \frac{b}{1448}\sqrt{438050} - 21158\sqrt{5} = ,09942715955065-64487487538694.$

The Radius of the Circle passing through the three acuter Angles of the Semi-rhomb, which are equidistant from the Center of the Body $= b\sqrt{\frac{1}{5}} - \frac{1}{5}\sqrt{5} - b = ,175570504-5849462583374119.$

The remaining Part of the longer Diagonal extending from the Center to the obtuse Angle $= \frac{1}{11}b\sqrt{\frac{185}{5}} + \frac{1}{5}\sqrt{5} - \frac{87b - 37b\sqrt{5}}{362} = ,1627406699907066.$

The longer Side $= b\sqrt{\frac{23}{5}} - \sqrt{5} - \frac{1}{4}\sqrt{1970} - 278\sqrt{5} = ,28962384924675696333559.$

The shorter Side $= \frac{1}{11}b\sqrt{83770} - \frac{1}{5}\sqrt{5} - \frac{1}{4}\sqrt{105661319210} - 43669848002\sqrt{5} = ,1915780820769485491326.$

The Radius of the Circumscribing Sphere $= \frac{1}{5}b\sqrt{15} - 2\sqrt{5} - 4\sqrt{10} - 2\sqrt{5} = ,529929242522256508336504793.$

The Radius of the Sphere passing through all the obtuse Angles of the Semi-rhomb $= \frac{1}{11}b\sqrt{75345} - 4305\sqrt{5} - 6\sqrt{5229965} + 2338682\sqrt{5} = ,5258179586786894775-85957.$

Area of the Semi-rhomb $= \frac{1}{5}b\sqrt{7875095} - 2922894\sqrt{5} - 8\sqrt{1544326256345} - 678139662118\sqrt{5} = ,0554008709724955568920352234.$

The Superficies $= \frac{1}{5}b\sqrt{7875095} - 2922894\sqrt{5} - 8\sqrt{1544326256345} - 678139662118\sqrt{5} = ,3324052258349733413522113402.$

The Solidity $= \frac{1}{5}b\sqrt{7875095} - 2922894\sqrt{5} - 8\sqrt{1544326256345} - 678139662118\sqrt{5} = ,554008709724955568920352234.$

The Radius of the inscrib'd Sphere $= \frac{1}{5}b = ,5.$

9. A Solid of Eighty Triangular Bases, Fig. 38. 1, 2.

Consisting of Twelve Pentagonal Pyramidal Figures like a b c d e o, each of them contain'd under five Isosceles Triangles, whose Bases ab, bc, cd, de, ea, &c. are the Sides of Twenty equilateral Triangles, such as a f b, intercepted betwixt the Pyramids.

It may be most commodiously cut out of the Cube, Fig. 39. whose Sides AF, AB, BD, EG, &c. are $= \frac{1}{5}b\sqrt{15} - \frac{1}{5}b\sqrt{3} = 1,070466269319269795826.$ Bisect every Side with the Lines LI, KH, KM, PN, &c.

1. Make IR, LS, NV, QW, K_v, M_v $= \frac{1}{5}b\sqrt{3} + \frac{1}{5}b\sqrt{15} = ,3307922691248037488-507252.$ Draw the Parallels SR, VW, v_v, &c. Join KV, RN, v_v. Cut off the Prisms SRCNPBS, WVCKHFW, and one such off every other Edge; in all Twelve.

2dly, Make IY, LZ, Ne, Qd, &c. $= \frac{1}{5}b\sqrt{3} - b\sqrt{15} - \frac{1}{5}b\sqrt{390} - 174\sqrt{5} = ,21680-902126013032825973;$ and Kf, Hg, Na, Pb $= \frac{2}{5}b\sqrt{3} + \frac{1}{5}b\sqrt{15} - \frac{1}{5}b\sqrt{435} - 186\sqrt{5} = ,141-$

=,1410882804467420647593. Draw the Parallels fg, ed, YZ, ab. Joyn aY, ef: Cut off the Prisms baCYZBb, deCfGfd, and one like these off every other Edge; in all Twelve.

3dly, Make Ik, Kl, Nm = $\frac{1}{2}b\sqrt{15} - b\sqrt{3} = 204440865534831148912$. Join kl, km, lm. Cut off the triangular Pyramid klCmk, and one like this off every other Angle; in all Eight.

4thly, Make Lh, Ln, Ij, Ip, Kd, Kz, My, Mθ, Nx, Nλ, Qn, Qμ = $\frac{1}{2}b\sqrt{\frac{7}{5}} - \frac{1}{2}b\sqrt{5} = ,388869634727848820491$; and Pu, Kr, Hσ, Nx, &c. = $\frac{1}{2}b\sqrt{3} - \frac{1}{2}b\sqrt{15} - \frac{1}{2}b\sqrt{150} - 6b\sqrt{5} = ,272714903521762615822$; and Pt, Ni, Kε, Hv, &c. = $b\sqrt{15} - b\sqrt{3} - \frac{1}{2}b\sqrt{30} + 6b\sqrt{5} = 493654331545875739558$. Draw the Lines np, hf, γδ, θζ, xμ, nλ, xt, iu, ρσ, τν, &c. Join xp, if, &c. Cut off the two Segments npCxtBn, hf/CiuBh, and two like these off every other Edge; in all Twenty-four.

5thly, Make Iq, Lβ, &c. = $\frac{1}{2}b\sqrt{15} - \frac{1}{2}b\sqrt{3} - \frac{1}{2}b\sqrt{15} - 6b\sqrt{5} = ,11046971401199-65621224$; and Lr, Io = $\frac{1}{2}b\sqrt{3} + \frac{1}{2}b\sqrt{15} - \frac{1}{2}b\sqrt{15} + 6b\sqrt{5} = ,467957218010032621415$; and Pa, Nz = $\frac{1}{2}b\sqrt{30} - 6b\sqrt{5} + \frac{1}{2}b\sqrt{3} - \frac{1}{2}b\sqrt{15} = ,4828407862506194689889$; and Ny, Pε = $\frac{1}{2}b\sqrt{3} - \frac{1}{2}b\sqrt{15} - \frac{1}{2}b\sqrt{15} - 6b\sqrt{5} = ,0323802520671380128487$; or since this distance is so small, rather make Cy, Bε = $\frac{1}{2}b\sqrt{15} - \frac{1}{2}b\sqrt{3} + \frac{1}{2}b\sqrt{15} - 6b\sqrt{5} = ,5028528825924368850644262$. Draw the Lines rq, ay, yq, βo, ui, oi. Cut off the Segments εζCοβBε, npCyaBn, and two such off every other Edge; in all Twenty-four.

Observing always to place the Lines of the same kind in different Positions upon the adjacent Bases (as pn, fh and λη, xμ and ζθ, δγ) viz. those Lines whose Intersections are in the Sides BA, CF, upon the Base ABCF, must upon the Base BECD, be in the Sides BC and DE, and on the Base CEGF in the Sides FG and CE, and vice versa.

The Perpendicular of the Equilateral Triangle = $\frac{1}{2}b - \frac{1}{2}b\sqrt{5} = ,28647450843757-886384655$.

The Side of it, and Base of the Isosceles Triangle = $\frac{1}{2}b\sqrt{3} - \frac{1}{2}b\sqrt{15} = ,330792269-1248037488507$.

The Side of the Isosceles Triangle = $\frac{1}{2}b\sqrt{9} - 3b\sqrt{5} - 6b\sqrt{1} - \frac{1}{2}b\sqrt{5} = ,29252260173-49740420899$.

The Perpendicular of it = $b\sqrt{\frac{5}{3}} - \frac{1}{2}b\sqrt{5} - \frac{1}{2}b\sqrt{1} - \frac{1}{2}b\sqrt{5} = ,24127492865528753-60188$.

The Radius of the Circle circumscribing the Equilateral Triangles = $\frac{1}{4}b - \frac{1}{4}b\sqrt{5} = ,190983005625052575897$.

The Radius of the Circle which circumscribes the Isosceles Triangles is equal to $3b\sqrt{409} - 153b\sqrt{5} - 4\sqrt{\frac{673}{5}} - \frac{719}{5}\sqrt{5} = ,1773277335583681767319$.

The Radius of the circumscribing Sphere = $\frac{1}{4}b\sqrt{15} - \frac{1}{4}b\sqrt{3} = ,5352331346596348-97912998$.

The Radius of the Sphere inscrib'd in the Equilateral Triangles = $\frac{1}{4}b = ,5$.

The Radius of the Sphere inscrib'd in, or touching all the Isosceles Triangles = $\frac{1}{4}b\sqrt{2082} - 294b\sqrt{5} + 48\sqrt{1346} - \frac{1238}{5}\sqrt{5} = ,50500433993049133856117$.

The Area of the Equilateral Triangle = $\frac{1}{2}bb\sqrt{3} - \frac{2}{5}bb\sqrt{15} = ,0473817763462397-2492066956$.

The Area of the Isosceles Triangle = $\frac{1}{2}b^2\sqrt{\frac{27}{5}} - \frac{4}{5}b^2\sqrt{5} - \sqrt{178} - \frac{328}{5}\sqrt{5} = ,039905-94056640384925375$.
The

The Superficies = $b^2x^{\frac{1}{2}}\sqrt{3} - \frac{4}{3}\sqrt{15} + \frac{4}{3}\sqrt{\frac{27}{8}} - \frac{1}{3}\sqrt{5} - \sqrt{178} - \frac{3}{5}\sqrt{5} = 3,341991960909025453638.$

The Solidity = $(b^2x)^{\frac{1}{2}}\sqrt{3} - \frac{1}{3}\sqrt{15} + \frac{1}{3}\sqrt{39} - \frac{8}{15}\sqrt{5} = 56099271798830962094557.$

10. A Solid of Eighty-four Quadrangular Bases, Fig. 40. 1, 2.

This Body is comprehended under Sixty Rhombs and twenty-four double Semi-rhombs, disposed into Six Astral Figures, like that in the middle of *Sch.* 40. which, by reason they do not point directly towards each other, seem near the Circumference somewhat distorted; though as truly and regularly drawn as so narrow a Compass would admit. This may justly be accounted as elegant and beautiful a Body as any of the rest, but is of a far more intricate and difficult Derivation: Therefore the several Parts could not be expressed in Surds, but I have endeavoured to lay them down in such analytical Terms as are equivalent, and render it possible at least, if not easie to continue them in Numbers to any Degree of accuracy required. That particular Term by which (or its Powers)

all the rest are expressed, is truly represented by $x = \frac{1}{2}\sqrt{19} + 3\sqrt{33} - \frac{1}{2}\sqrt{19} - 3\sqrt{33} - \frac{1}{2} = .419643377607080566275926282326$, and $xx = .1761005643694788072547508517866$, and the Powers may easily from these be continued to any Degree; for $\frac{1}{2} - xx = x^3$, and $\frac{1}{4}x - x^3 = x^4$, and $\frac{1}{4}x^2 - x^4 = x^5$, &c. But I have ordinarily us'd none but those above, except Brevity rendred the others more eligible, since they may at pleasure be varied, and others either of a lower or higher Degree substituted.

To cut this Body from the Cube, Fig. 41. whose Sides ED, FC, AG, DC, &c. are $= \sqrt{2xx} + 2x - 4x^2 = 4x^2\sqrt{4x} + \frac{1}{2} = 1,039697137978998084902646$. Bisect every Side with the Lines IK, HM, NL, HP, IU.

1st, From the middle of every Side set off both ways $\sqrt{2xx4x^2} - \frac{1}{2} = .187258212197048481954417 = IV, KX, HQ, MS, LR, NT, OW$. Draw the Parallels VX, QS, RW, RT, &c. Cut off the Prisms SQBRTCS, XVBRWEX, and one like these off every other Edge; in all Twelve.

2^{dly}, Make IZ, OD, Ka, Hb, My, &c. $= \sqrt{2xx2x} + 10x^2 - \frac{1}{2} = .0918804691708074849494589$; and KY, Lc, Id, He, Mz $= \sqrt{2xx4x} + 6x^2 - \frac{1}{2} = .215451657722456834541450$; and La, Kf $= \sqrt{2xx3x} + 3x^2 - \frac{1}{2} = .263140529235577333043929$; and Ob, Ig $= \sqrt{2xx\frac{1}{2}} - 2x - 7x^2 = .392110421012234652257849$. Joyn ZY, Za, ab, cd, cg, gf. Cut off the Segments YZBabEY, dcBgfEd, and two like these off every other Edge; in all twenty-four.

3^{dly}, Make Hk, Iq, Lm $= \frac{1}{2}\sqrt{2x} = .458062974713674367655327$; and Hl, Ih, Lp $= \sqrt{2xx} + 4x^2 - 1 = .1136414252145602138999575$; and Hi, In, Le $= \sqrt{2xx\frac{1}{2}} + 2x^2 - 2x = .01183119270666359325846387$; or because this Extent is too small, let Ei, Cn, Ae, be $= \sqrt{2xx3x} - 4x^2 = .50801737628283544919285914$. Draw the Lines kh, ke, eh, iq, qp, pi, ml, ln, mn. Cut off the Pyramids khBpk, iqBpi, lnBml, and three like these off every other Angle; in all twenty-four.

4^{thly}, Make It, Kx, Lu, Oy $= \sqrt{2x \times \frac{1}{2}} - 2x - 2x^2 = .282635955223289478959374$; and Ow, Ir $= \sqrt{2x \times 3} - 2x - 10x^2 = .36618250554286688270586837$; and Ks, Lo $= \sqrt{2x \times 6x} - 2 = .47442522753241912698389708$. Joyn xt, to, ow, yu, ur, rs. Cut off the Segments woBtxEw, srBuyEs, and two such off every other Edge; in all twenty-four.

Or

Or, to avoid the Confusion which the Multiplicity of Lines may occasion, after the former Sixty Sections are made, there will remain a little Square like that $\Gamma\Delta\Theta A$, in the middle of every Base of the Cube (in all Six.) From the Angles of each of them draw Diagonals, from the Extremities of which draw Lines on the contiguous Planes meeting in the nearest Acute Angles of the Rhombs before form'd, whereby four small triangular Pyramids may be cut from every of the Squares; in all twenty-four; forming the Semi-rhombs, and finishing the Body.

It may also be otherwise cut out of the Parallelepipedon, Fig. 42. whose Length DE, BA, HG = $\sqrt{2x \times 1 + 2x - 4x^2} = 4x\sqrt{1 - \frac{1}{2}x} = 1,0396971379789980849026$; its Breadth BH, EF, and Height BD, GF = 1. Bisect every Side with the Lines NK, IM, KP, OQ, LO, RI.

1st. Make Ic, Rf = $\sqrt{2x \times x + 2x^2} - \frac{1}{2} = ,2490438064728731767504$, and Md, Ie = $\frac{1}{2}\sqrt{2x} = ,458062974712674367655327$, and OX, PW = $4x^2 - \frac{1}{2} = ,904402257-477915229019003$; and KT, Qa = $2x - \frac{1}{2} = ,3392867552141611325518526$. Draw the Lines cd, cX, Xa, fe, eT, TW. Cut off the Segments dcAXaEd, feATWGf, and one like these off every of the other shorter Edges; in all Eight.

2^{dly}, Make MV, Iy, Ix = $\sqrt{2x \times 1 - x - 2x^2} = ,209019168240801210904917$; and Oo, Pz = $\frac{1}{2} + 2x - 6x^2 = ,282683368997288289023347$; and QY, Kx = $6x + 2x^2 - \frac{1}{2} = ,370061394381441012165059$. Join IV, yR, Io, Yo, zx, xy. Cut off the Segments VIaOYEV, zxAyRGz, and one like off every shorter Edge; in all Eight.

3^{dly}, Make Kg, Lp, Np = $\sqrt{x \times \frac{2 - 12x - 22x^2}{2 - 2x}} = ,05026679523598309798468$; and Ni, Ok, Kv = $\sqrt{x \times \frac{52x \times 1 + 20x^2 - 25}{10 - 52x^2}} = ,2640071581416949810118337$; and Ol, Nm, = $\frac{2 - 14x - 12x^2}{2 + 4x} = 275048449677254651382785$; and Kn, Lb = $\frac{18x + 28x^2}{2 + 4x} = ,40352506075105761372092$. Join ig, gl, lb; pk, kn, nm. Cut off the Segments igAlbBi, mnAkpBm, and two like these off every longer Edge; in all Eight.

4^{thly}, Make Kq, Of = $4x + 6x^2 - \frac{1}{2} = ,23517689664519510863221$. Join Iq, qf, If. Cut off the Pyramid IqAIf, and one like it off every other Angle; in all Eight.

5^{thly}, Make Oy, Pz = $\sqrt{x \times \frac{10x^2 + x - 2}{4x + 4x^2 - 1}} = ,084617702500262803901865$; and Kw, Qa = $\sqrt{x \times \frac{6x^2 - x}{3x + 4x^2}} = ,298358065405974688576257$; and In, Rf = $4x\sqrt{2x} = ,11364142521456021389996$; and If, Mb = $2x\sqrt{2x} = ,32266059345536142480487$. Draw the Lines Is, uy, yu, st, tw, wZ. Cut off the Segments IsAyaEs, stAwZGs, and one like these off every shorter Edge; in all Eight.

6^{thly}, Make Oa = $\sqrt{x \times \frac{8 - 9x - 23x^2}{7x + 6x^2}} = ,112666174399298896007295$; and Ke = $\sqrt{x \times \frac{7x + 29x^2 - 8}{5 - 3x - 14x^2}} = ,02255709826206261370695$; Or, because this Extent is so small, let Es be = $\sqrt{x \times \frac{10 - 9x - 30x^2}{5 - 3x - 14x^2}} = ,477442901737937386293047$; and Is = $x\sqrt{2x} = ,384446187731186099600868$. Join es, Is, Is. Cut off the triangular Pyramid esAIs, and one like it off every other Angle; in all Eight.

7^{thly}, Make On, Pm = $\sqrt{x \times \frac{8 - 19x + 4x^2}{10x - 3}} = ,39589014143103397608255$; and Ks, Qr = $\sqrt{x \times \frac{24 - 45x - 28x^2}{10x - 3}} = ,10029239890894920510005$; and Is, Rf = $x\sqrt{2x} =$

38444618773118609960087. Draw the Lines Mx , xn , $n\pi$; $I\xi$, IS , $S\mu$. Cut off the Segments $MxAn\pi EM$, $\mu SAI\xi G\mu$, and one like these off every other shorter Edge; in all Eight.

8thly, After all these 56 Sections are dispatch'd, there will remain in the middle of the Base AGFE, a little Square, and another in the Base opposite, upon which Diagonals must be drawn, &c. and four small Segments cut off either, as is directed in the 4th § of the former Method, amounting to Eight more, being Semi-rhombs.

9thly, There will still remain Sixteen Quadrilateral Planes like ADBE, Fig. 45. upon every of which, from the Angles B and A set off $AI = BK = 2x^3\sqrt{2} = ,2090191624-08012109034$. Draw the transverse Lines AK, BI, and the like on every of the Planes, by which Sixteen small triangular Pyramids may be cut off, forming so many more of the Semi-rhombs, and finishing the Body by Eighty Sections.

The longer Diagonal of the Rhomb $= \sqrt{1 - 2x} = ,4008905646006636424$.

The shorter $= \sqrt{6x^2 - 1} = ,237914661626543823$.

The Side of the Rhomb $= \sqrt{\frac{1}{2}x^2 - \frac{1}{2}x} = ,2330861595004686804$; which is also the longer Side of the Semi-rhomb.

Its longer Diagonal $= \sqrt{5 - 5x - 16x^2} = ,29012769956165208116$.

The greater Part of it $= \sqrt{2x^2 - \frac{1}{2} + \sqrt{\frac{1}{2}x - 2x^4}} = ,22393347104547502859$.

The shorter Part $= \sqrt{3x - 7x^2 - \sqrt{\frac{1}{2}x - 2x^4}} = ,06619422851617705256$.

The shorter Side of the Semi-rhomb $= \sqrt{\frac{1}{2} + \frac{1}{2}x - \frac{1}{2}x^2 + \sqrt{\frac{1}{4} - 8x^4}} = ,092545-30882251780855$.

Its shorter Diagonal $= \sqrt{\frac{1}{2} - x - x\sqrt{2x - 4x^3}} = ,12935158748470503803$.

Radius of the Sphere inscrib'd in the Rhombs $= \frac{1}{2}b = ,5$.

Radius of the Sphere inscrib'd in the Semi-rhombs $= \frac{1}{2}\sqrt{\frac{17 - 21x - 46x^2}{5 - 5x - 16x^2}} = ,507923-720525049176094$.

Radius of the circumscribing Sphere $= \sqrt{\frac{1}{2} - \frac{1}{2}x} = ,53868201306193593715$.

Radius of the Sphere circumscribing the obtuse Angles of the Rhomb $= \frac{1}{2}x\sqrt{6} = ,51395607453771592802902$.

Radius of the Sphere passing through the other obtuse Angle of the Semi-rhomb $= \sqrt{\frac{7}{2} - 10x^2 - \frac{7}{2}x} = ,5198485689894990435$.

The Area of the Rhomb $= \sqrt{\frac{9}{2}x^2 + \frac{1}{2}x - 1} = ,0476888715131204988975$.

The Area of the Semi-rhomb $= \sqrt{\frac{3}{4} + x - \frac{9}{4}x^2 - \frac{1}{4}\sqrt{889x^2 + 430x - 337}} = ,0187642392557926293446$.

The Superficies $= 60\sqrt{\frac{9}{2}x^2 + \frac{1}{2}x - 1} + 24\sqrt{\frac{3}{4} + x - \frac{9}{4}x^2 - \frac{1}{4}\sqrt{889x^2 + 430x - 337}} = 3,31167403292625303812$.

The Solidity $= 10\sqrt{\frac{9}{2}x^2 + \frac{1}{2}x - 1} + 2\sqrt{\frac{427}{5}x + 175x^2 - 133 - \sqrt{186384x^2 - \frac{10723}{4}x - 15257}} = ,553135132856199966628$.

The greater Part of the longer Diagonal of the Semi-rhomb extending from the acute Angle to the Perpendicular from the Center $= \frac{1}{2}\sqrt{\frac{1 + x - 8x^2}{5 - 5x - 16x^2}} = ,179420749425-62094284$.

The less $= \frac{1}{2}\sqrt{\frac{41x - 92x^2 - 1}{5 - 5x - 16x^2}} = ,11070695013603113832$.

11. A Solid of Ninety Quadrilateral Bases, Fig. 43. 1, 2, 3.

This Body is contained under twelve Decagonal Figures, like $abcdefghik$ in the middle of *Sch.* 43. (1.) each of them compos'd of the Five Semi-rhombs $bdfhk\odot$, and Five Rhombs intercepted, a, c, e, g, i : Every of these appertains also to another of the same Figures, so that there are only Thirty Rhombs, but Sixty Semi-rhombs very little differing from the Rhombs in Size or Form. This Body may be most commodiously cut out of the Cube, *Fig.* 44. whose Sides $BA, FH, GE, \&c.$ are all $= b = 1$. Bisect every Side with the Lines IK, LM, RP, OL, IT, PQ .

1. Make $KW, IS, QX, Pb = \frac{1}{4}b - \frac{1}{4}b\sqrt{5} = ,190983005625052575897$; and $RZ, PV, LY, Md = ,22360679774997896964 = \frac{1}{4}b\sqrt{5}$. Draw the Parallels WS, ZV, Yd, Xb . Join SV, XY . Cut off the Prisms $ZVDSWBZ, dYDXbHd$, and one more like these off every other Edge; in all Twelve.

2. Make $Kh, If, Rg, Pa = \frac{1}{4}b\sqrt{5} - b = ,1180339887498948482056$. Join Bf, Dh, Dg, Ba, af . Cut off the triangular Pyramids $BaDfB, DgBhD$, and two like these off every other Edge; in all Twenty-four.

3. Make $Lk, Ll, Mm, Mq, Py, Pe, R^d, Ra, i\Delta, i\Gamma, T\Lambda, T\Xi = \frac{1}{4}b = ,16666, \&c.$ and $Lf, Lt, Mw, Mp, Pn, P\beta, R\zeta, R\zeta, i\Theta, i\Sigma, T\Gamma, T\Phi = \frac{1}{4}b\sqrt{5} = ,3726779962499649494$. Draw the Lines kp, sq, wl, tm , forming the Rhomb $ABCD$: Draw also $\zeta e, \delta n, a\beta, \xi\gamma$, and $\Theta\Lambda, \Lambda\Phi, \Gamma\P, \Sigma\Xi$, forming Rhombs on the other two visible Bases of the Cube (these being drawn chiefly to shew how they, and likewise all the other Lines, must be differently placed upon the contiguous Bases.) Make $Pi, Qz = \frac{3}{8}b - \frac{1}{4}b\sqrt{5} = ,279982-111184265869$; and $Pu, Qy = \frac{1}{4}b - \frac{1}{8}b\sqrt{5} = ,457980322302692445$. Join iy, ik, uz, ut . Cut off the Segments $yiDkpEy, zuDtmEz$, and two like these off every other Edge; in all Twenty-four.

4. Make $Ls, Mx = \frac{1}{4}b - \frac{1}{8}b\sqrt{5} = ,0339946333552797608098$, and $Lx, Ms = \frac{3}{8}b + \frac{1}{4}b\sqrt{5} = ,4320107332894404784$; and $Pn, Q\Lambda = \frac{1}{4}b - \frac{1}{8}b\sqrt{5} = ,0985083-7590920562014045$; and $Po, Qr = \frac{1}{4}b - \frac{1}{8}b\sqrt{5} = ,448881281931904215105338$. Draw $xx, \epsilon\delta, o\Lambda, ox, nr, ns$. Cut off the Segments $rnD\epsilon\delta Er, \Lambda oDxxE\Lambda$, and two like these off every other Edge; in all Twenty-four: So that the Body will be perfected by Eighty-four Sections.

The longer Diagonal of the Rhomb $= \frac{1}{4}b - \frac{1}{4}b\sqrt{5} = ,381966011250105151795413$.

The shorter Diagonal of the Rhomb and Semi-rhomb $= \frac{1}{4}b\sqrt{5} - \frac{1}{4}b = ,2060113295-8329827348$.

The Side of the Rhomb, and longer Side of the Semi-rhomb $= \frac{1}{4}b\sqrt{33} - 14\sqrt{5} = ,2169900352936706895747$.

The longer Diagonal of the Semi-rhomb $= \frac{3}{8}b - \frac{1}{8}b\sqrt{5} = ,33882600532899717-71662$.

The longer Part of it $= \frac{1}{4}b - \frac{1}{4}b\sqrt{5} = ,1909830056250525758977$.

The shorter $= \frac{1}{4}b + \frac{1}{4}b\sqrt{5} = ,1478429997039446012685$.

The shorter Side of the Semi-rhomb $= \frac{1}{4}b\sqrt{735} - 140\sqrt{5} = ,1801880116451428-935302$.

The Radius of the Circumscribing Sphere $= \frac{1}{4}b\sqrt{15} - \frac{1}{4}b\sqrt{3} = ,535233134659634-897913$.

The Radius of the inscrib'd Sphere $= \frac{1}{4}b = ,5$.

Radius of the Sphere circumscribing the obtuse Angles of the Rhombs $= \frac{1}{4}b\sqrt{\frac{1}{2} - \frac{1}{2}\sqrt{5}} = ,5104999186867414061741914217$.

The Radius of the Sphere circumscribing the other obtuse Angle of the Semi-rhombs $= \frac{1}{4}b\sqrt{\frac{7}{2} + \frac{1}{2}\sqrt{5}} = ,52139960928395464559862$. The

The Area of the Rhomb = $\frac{1}{2}bb\sqrt{5} - \frac{1}{3}bb = ,0393446629166316160681956114$.

The Area of the Semi-rhomb = $\frac{7}{8}b^2\sqrt{5} - \frac{1}{4}b^2 = ,034900997927612208879792312$.

The Superficies = $\frac{10}{3}b^2\sqrt{5} - \frac{3}{2}b^2 = 3,27439976315568101483340704$.

The Solidity = $\frac{10}{3}b^3\sqrt{5} - \frac{3}{4}b^3 = ,545733293859280169138901173$.

12. A Solid of One hundred and twenty Quadrilateral Bases, Fig. 47. 1, 2, 3.

This Body comprehended under Sixty Rhombs and Sixty Semi-rhombs, consists of Twelve Decagonal Figures, like *abcdefghik* represented in the middle of the Draught (1) (compos'd of Five Semi-rhombs and Five Rhombs) evidently distinguish'd, and not at all interfering with each other, being surrounded with several Rings or Chains, each consisting of Ten Rhombs connected in the acute Angles, which apparently distinguish this Body from that of Ninety Bases, to which it bears a near Resemblance.

It scarce need be suggested, that it cannot, without great Inconvenience and Confusion, be cut immediately out of the Cube, since the Lines must unavoidably be so numerous, as with the utmost Care and Caution scarce to be distinguishable: I have therefore rather chosen to perform it at twice.

Let the Sides of the Cube, Fig. 46. *AE, BF, HG, &c.* be = $b\sqrt{2} - \frac{1}{4}\sqrt{5} = 1,051462-224238267212052$. Bisect every Side with the Lines *IK, MN, NP, LO, OR, IQ*.

1. Make *NV, MW, Oa, Lb* = $\frac{1}{2}b\sqrt{\frac{1}{5}} - \frac{1}{4}\sqrt{5} = ,262865556059566803013$; and *IS, KX, Rw, Ou* = $\frac{1}{2}b\sqrt{\frac{1}{5}} - \frac{1}{4}\sqrt{5} = ,1004057079431136399$. Draw the Parallels *VW, uw, XS, ba*. Join *Vu, Sa*. Cut off the Prisms *WVDuWEW, XSDabBX*, and one more like these off every other Edge; in all Twelve.

2dly, Make *IT, IU, KY, KZ, Nk, Nc, Pm, Pq* = $b\sqrt{1} - \frac{1}{4}\sqrt{5} = ,324919696232390632615587$, and *Oe, Id, Lh, Qp* = $\frac{1}{2}b\sqrt{5} - 2\sqrt{5} = ,29061701120213687456$; and *Og, In, If, Qo* = $\frac{1}{2}b\sqrt{\frac{1}{5}} - \frac{1}{4}\sqrt{5} = ,4702282018397850333496$. Draw the Lines *ZT, YU, gh, fe, eq, km, np, do*. Join *Ue, Tg, cd, kn*. Cut off the Segments *YUDefBY, ZTDghBZ*, and two more like these off every of the other Edges; in all Twenty-four.

3dly, Make *Ix, Is, Ks, Ka, Na, Oy* = $2b\sqrt{\frac{1}{5}} - \frac{1}{4}\sqrt{5} = ,4016228317724545597$; and *Iz, Of, Na, Ny, Mz, M9* = $\frac{1}{2}b\sqrt{5} - 2\sqrt{5} = ,14530850560106843728$; and *Ox, Nu, Ir* = $b\sqrt{\frac{1}{5}} - \frac{1}{4}\sqrt{5} = ,0474051448071308127023$. Join *xe, at, tx, and zu, vy, yz*, and *rg, sf, ft*. Cut off the three triangular Pyramids *aDtxa, vDyz, rDsr*, and three more like these off every of the other Angles; in all Twenty-four.

By these Sixty Sections will be form'd a Body of Sixty Quadrilateral Bases like *ACGB*, Fig. 48. upon every one of which from the Angles *B* and *C* set off $\frac{1}{2}b\sqrt{\frac{1}{5}} - \frac{1}{4}\sqrt{5} = ,1648130623238083164636 = CE=BF$. Draw the Lines *BE, CF* on every Base, whereby Sixty small Pyramidal Segments may be cut off, which will perfect the Body.

The longer Diagonal of the Rhomb = $b\sqrt{1} - \frac{1}{4}\sqrt{5} = ,32491969623290632613587$.

The shorter = $\frac{1}{2}b - \frac{1}{4}b\sqrt{5} = ,1909830056250525758977$.

The Side of the Rhomb, and the longer Side of the Semi-rhomb = $\frac{1}{2}b\sqrt{\frac{1}{5}} - \frac{1}{4}\sqrt{5} = ,18844582605994685792925$.

The longer Diagonal of the Semi-rhomb = $\frac{1}{2}b\sqrt{\frac{1}{5}} - \frac{1}{4}\sqrt{5} = ,285545276667087097807$.

The longer Part of it terminating in the shorter Diagonal = $\frac{1}{2}b\sqrt{\frac{1}{5}} - \frac{1}{4}\sqrt{5} = ,170039785923502292499$.

The shorter Part thereof = $\frac{1}{2}b\sqrt{\frac{1}{5}} - \frac{1}{4}\sqrt{5} = ,115505490743184804278557$

The

The longer Part of it that terminates in a Perpendicular from the Center $= b\sqrt{\frac{2}{3}} - \frac{1}{2}\sqrt{5} = ,1552178045077922904881527.$

The shorter Part $= \frac{2}{11}b\sqrt{\frac{3}{2}} - \frac{3}{14}\sqrt{5} = ,1303274721592948073216.$

The shorter Diagonal of the Semi-rhomb $= b\sqrt{\frac{1}{4}} - \frac{1}{10}\sqrt{5} = ,1624598481164531.63077935.$

The shorter Side $= \frac{1}{44}b\sqrt{\frac{2}{3}} - \frac{4}{11}\sqrt{5} = ,141208423808289895139.$

The Radius of the circumscribing Sphere $= b\sqrt{\frac{1}{2}} - \frac{1}{10}\sqrt{5} = ,52573111211913360.602569.$

The Radius of the Sphere circumscribing the obtuse Angles of the Rhombs equal to $\frac{1}{4}b\sqrt{\frac{1}{2}} - \frac{3}{2}\sqrt{5} = ,509036960455127218092.$

The Radius of the Sphere circumscribing the other Angles of the Semi-rhombs $= \frac{3}{11}b\sqrt{5} - \frac{1}{11}b = ,518927630227215371747956.$

The Radius of the Sphere inscrib'd in the Rhombs $= \frac{1}{4}b = ,5.$

The Radius of the Sphere inscrib'd in the Semi-rhombs $= b\sqrt{\frac{1}{2}} - \frac{6}{14}\sqrt{5} = ,502295.36670548913760844.$

The Area of the Rhomb $= \frac{1}{4}bb\sqrt{\frac{1}{2}} - \frac{2}{10}\sqrt{5} = ,03102707008666976157151807.$

The Area of the Semi-rhomb $= \frac{1}{44}b^2\sqrt{67,9} - 29,9\sqrt{5} = ,023194821138852783591.3882.$

The Superficies $= 15b^2\sqrt{\frac{1}{2}} - \frac{2}{10}\sqrt{5} + \frac{1}{11}b^2\sqrt{67,9} - 29,9\sqrt{5} = 3,2533135203330.2395839413.$

The Solidity of the Body $= \frac{1}{2}b^3\sqrt{6,5} - 2,9\sqrt{5} + \frac{1}{11}b^3\sqrt{185} - 82\sqrt{5} = ,54328373.2459141959479535 = \frac{1}{11}b^3\sqrt{\frac{14885}{2} - \frac{6529\sqrt{5}}{2}}.$

These Six last Bodies, the Number of whose Bases amount to Sixty or upwards, may very commodiously, and with much less Intricacy and Labour of Calculation and Delineation, be cut out of a Sphere (provided it be truly form'd, and rightly prepar'd.) In order hereto, in the Sphere, *Fig. 49. Plate III.* First fix the Poles A, B. with as much Accuracy as possible, since the Truth of all the rest depends thereupon. Next draw the Equator DE, or the great Circle, which bisects the Sphere, whose visible Center is either of those Poles A or B: Divide this Circle into ten equal Parts, of which Six Points only, *i. e.* D, a, d, f, g, E, appear in the Scheme: Through each of these ten Points draw Meridians or great Circles coinciding in the Poles A and B. Hereby the Sphere will be prepar'd for the drawing and forming Five of the Six Bodies, *viz.* all except that of Eighty-four Bases.

The Five Meridians or great Circles last drawn, are to be thus divided (*viz.* every Semi-circle alternately alike, beginning the next always at the Pole opposite to that where the former was begun.) Supposing the Equator DE divided into 360 Degrees and their proper Parts, take from thence, or from a Line of Chords of the same Length with the Radius of the Sphere, 63, 26, 05⁸, and set off AR = BY = AX = BZ = AW = BV. Set a Mark upon every of those Points (which will be precisely Ten) as here O. Make BI = AP = BL = AO = BS = AF = 37, 22, 38⁹ = RH = YM = XK = ZN = WQ = VG: Whereby every Circle will be divided into Eight unequal Parts, or six Points will be found in each besides the two Poles.

Fig. 49. The Diameter of the Sphere to render the Altitude of the Body of Sixty Triangles = 1, must be $= \sqrt{10} - \sqrt{5} - \sqrt{39} + 6\sqrt{5} = 1,083890766696328535788.$
Z z The

The Chords suited thereto must be, for $37^{\text{d}}, 22', 38'' = ,34730662298$; for $63^{\text{d}}, 26', 05'' = ,56983497326$. The thirty-two Points found as above, represent all the solid Angles of this Body, so that lesser Circles drawn through every three next adjacent Points, as PRM, PMX, PAO, PXO, OXN, XNK, KNZ, (whose Centers and Semidiameters are easily obtain'd from those three Points in the Circumference) shall circumscribe the sixty Triangles, by which the Segments may be cut off, observing to continue the Lines or Chords on each Plane after every Section.

The Body of *Sixty Semi rhombs* may be thus delineated upon the Sphere. Bisect the Arches of those great Circles which connect every two mark'd Points that are nearest to each other, as the Point b bisects the Arch AR, and f, q, r, C, t, y, a, the Arches RX, KY, XY, XZ, YZ, BY, XA, &c. These middle Points b, f, q, r, C, t, y, a, &c. shall be the Centers, and the Distance from thence to either of the next mark'd Points the Semidiameters, whereby all the sixty little Circles may be drawn, and the Segments cut by them, continuing the Chords on every Plane: The Diameter of the Sphere to render the Altitude of this Body = 1, must be $= \sqrt{15} - 2\sqrt{5} - 4\sqrt{10} - 2\sqrt{5} = 1,0598584,$

8504451316673 : The Chords for $37^{\text{d}}, 22', 38''$, is $,33960605802$; for $63^{\text{d}}, 26', 05''$, is $,557200457915$.

For the Solid of Eighty Triangles, the Diameter of the Sphere to make its Altitude = 1, must be $\frac{1}{2}\sqrt{15} - \frac{1}{2}\sqrt{3} = 1,070466269319269796$: The Chord for $63^{\text{d}}, 26', 05''$, is $,562777298915$. To delineate it upon the Sphere, the Arches of those great Circles which connect the mark'd Points being bisected as in the preceding, those middle Points b, f, q, r, C, t, y, &c. and the mark'd Points will represent all the solid Angles of this Body; therefore if small Circles be drawn through every three of these Points that are nearest each other (whose Centers and Semidiameters are easily found) all the Eighty Triangles will be circumscrib'd, and Segments may thereby be cut, which will perfect the Body.

For the Body of Ninety Bases, the Sphere must be of the same Diameter, and the Chords the same with the preceding of Eighty Triangles, and the Delineation the same; for having found the thirty middle Points, viz. b, f, q, r, C, t, y, a, &c. as above, upon every of them as a Center with the Semidiameter $20^{\text{d}}, 54', 18''$ taken from the Equator (or $,199206027792$, such Parts as the Diameter is $1,070466$ &c.) draw thirty small Circles, and cut off thereby thirty Segments, forming so many circular Planes: Through the Centers of every of these Planes draw Diameters, as k e, perpendicular to those Arches of great Circles which connect the mark'd Points; and upon the Circumference of every one of those Circles, from the Extremities of the Diameter set off $eh = en = kq = km = 19^{\text{d}}, 30', 14''$, taken from the Equator, or $,18132013695182457$ such Parts as the Spheres Diameter is $1,070466$ &c. Draw the transverse Lines em, eq, kn, kh upon every of these circular Planes, whereby four Segments may be cut off from each, which will perfect the Body.

The Solid of One hundred and twenty Bases, to render its Altitude = 1, will require a Sphere whose Diameter is $\sqrt{2} - 2\sqrt{5} = 1,051462224238267212$. The Chords answerable thereto, are for $63^{\text{d}}, 26', 05'' = ,55278628360$; for $18^{\text{d}}, 00', 00'' = ,16448493056$. To delineate it on the Sphere, the Arches of the great Circles connecting the mark'd Points being bisected, as in that of 80 Triangles, and those middle Points again connected by others

other Arches, and these bisected, upon the middle of every of those less Arches, as a Center, with the Extent $18^{\circ} 00' 00''$, as the Radius (taken from the Equator, or a Line of Chords of the same Radius with the Sphere) = ,16448493056, draw small Circles which will be 60 in all: And having thereby cut off sixty Segments, there will appear twenty Figures like that Fig. 51, consisting of three double Semi-rhombs obtuncated, coinciding in the obtuse solid Angle at C, viz. AEGBC, BHIDC, DFKAC. Make AE,

BG, BH, ID, DF, AK = ,1648130623238, or in Degrees of the Equator = $17^{\circ} 42' 48''$. Draw the Lines AG, BE, BI, DH, DK, AF, compleating the Rhombs AMBC, BCDN, DCAL. By these Lines the other sixty Segments may be cut off, finishing the Body of 120 Bases.

For the Solid of Eighty four Bases a different and somewhat more intricate Delineation is requir'd. The Diameter of the Sphere, to render the Altitude of the Body = 1, must be = 1,0773640261238718743 (in Fig. 50.) Having found the Poles A, B, and drawn the Equator MF, and divided it into four equal Parts, and subdivided each Quarter into 90 Degrees and their Parts, as the Capacity will admit, upon every of the six Cardinal Points

A, B, F, M and C and its opposite Point as Centers, with the Radius $31^{\circ} 45' 04''$ taken from the Equator, or a Line of Chords of the same Radius with the Sphere (or 29471350790915 Parts suited to the Diameter above) describe the small Circles SRVT, EPD, GZH, IQK, NOL, and another opposite to the first. Having drawn the two great Circles AFBM, ACB, passing through the Poles at right Angles and dividing the Sphere

into Four equal Parts, upon both of them, from the Equator and Poles, set off $28^{\circ} 31' 56''$, or ,265492297339187 Parts of the same Diameter = Fu = Aq = Mr = Bf, viz. all four Points the same way for dividing the same Circle, i. e. f b d h: But all the contrary way for the opposite Circle. Ex, gr. from the four Points last found through C draw the Semi-circles uCr, qCf, dividing the little Circle in R, S, T, V, its four proper equal Parts:

But for dividing its opposite Circle, the Chord $28^{\circ} 31' 56''$ must be set off on the contrary Side, i. e. from F to w, from B to x, from M to y and from A to z: And Semi-circles drawn through these Points w, y, x, z and the opposite Center will divide that little Circle also into its Four proper Parts. The like may be done for dividing the other Four small Circles: Yet if these Four Semicircles be truly drawn, two Points will be found in every of the Four other little Circles, one of which in each is visible in this Scheme, viz. a, e, g, k, from which the rest may easily be obtain'd.

But since there is no small Trouble and Difficulty in drawing these Semicircles truly, 'twill be much more easie and expeditious, from the Intersections of the Equator FM and the two Colures or Meridians AFBM and ACB with the little Circles, to set off the

Chord $14^{\circ} 54' 07''$, taken from the Equator or a Line of Chords of the same Radius (or ,1397108992657956 such Parts as the Diameter above) = bR = dV = hT = fS = Ga = De = Lg = Ik, &c. observing to set off all these Four Arches the same way upon the same Circle, but the contrary way upon every of the Four next it on all Sides. Hereby the Six small Circles being divided each into Four equal Parts, every two nearest of these Twenty-four Points must be connected together with an Arch of a great Circle: Bisect every of these Arches, and upon the middle as a Center, with half the length as a Ra-

dus, which will be = $21^{\circ} 50' 43''$ = ,204143600308, draw Sixty small Circles, thereby cut

cut off Sixty Segments, forming thirty-six Rhombs and Twenty-four Figures like ADBGF

Fig. 52. Therein make $AI = BC = 22, 22, 25^{\frac{1}{2}}$ taken from the Equator or Line of Chords, or in Parts of the Diameter above, 2090191682408012. Draw the Lines AC, BI on every of the Twenty-four Planes, which complete the Rhomb AD^dBH, and direct the cutting off Twenty-four Segments more, forming the Twenty-four Semi-rhombs, and finishing the Body of Eighty-four Bases.

Besides the two different Methods already exhibited of forming these *Polyedra*, or Solid Bodies, viz. out of the Cube and Sphere, Five of them may be cut out of other Solids before prepar'd, i. e. both those of Sixty, and that of an Hundred and twenty Bases out of the *Dodecaedron*; that of Eighty out of the *Icosaedron*, and that of Ninety out of the Body of Thirty Rhombs.

1. The Side of the Cube out of which the *Dodecaedron* must be cut, so as to render the Altitude of the Body of Sixty Triangles deduc'd therefrom $= b = 1$, must be $= b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} - \sqrt{150} - 30\sqrt{5} = 1,27419001552016720019177$. The Parts to be set off from the middle of every Side of the Cube must be $= \frac{1}{2}b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} - 10\sqrt{51} - \frac{1}{2}\sqrt{5} = ,243348638901473921399106 =$ half the Side of the *Dodecaedron*, whose Altitude will be $= b\sqrt{10} - \sqrt{5} - \sqrt{30} + 6\sqrt{5} = 1,0838907666963285357883438$. The greater Part of the Diagonal of the Pentagon $= b\sqrt{\frac{8}{5}} - \frac{3}{2}\sqrt{5} - \sqrt{390} - 174\sqrt{5} = ,414009432785814923894776$. The lesser Part $= \frac{1}{2}b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} - 4\sqrt{15} - 6\sqrt{5} = ,334940666955256805946784$. The whole Diagonal $= \frac{1}{2}b\sqrt{\frac{5}{2}} - \frac{6}{5}\sqrt{5} - 10\sqrt{15} - 6\sqrt{5} = ,748950099741071729841560131$. The Radius of the Sphere circumscribing the *Dodecaedron* $= \frac{1}{2}b\sqrt{16} - 75\sqrt{5} - 30\sqrt{\frac{5}{2}} - \frac{3}{2}\sqrt{5} = ,681988716158867931571999$. By these Numbers the *Fig. 53. Plate III.* representing the *Dodecaedron in plano* may be truly drawn.

Through the Center of every Base of the *Dodecaedron* draw Diameters parallel to all the Sides, as HF. To do this with greater Certainty, from the middle of each Side set off $IH = LF = \frac{1}{2}b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} - 4\sqrt{51} - \frac{1}{2}\sqrt{5} = ,10882881976314908720015$. From every Angle set off upon the Sides $\frac{1}{2}b\sqrt{675} - 299\sqrt{5} - 2\sqrt{\frac{385}{2}} - \frac{1}{2}\sqrt{5} = ,208144956241766024013539 = AN = GM$. Draw the Parallels NM, &c. Join FN, HM; whereby the Prism HFNMGAF may be cut off; and two like this must be cut off every Edge, in all Sixty, taking care to continue the Lines.

2. In order to the forming the Body of Sixty Semi-rhombs, so that its Altitude may be $= b = 1$, the Side of the Cube from which the *Dodecaedron* is to be cut, must be $= b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} - 40\sqrt{1} - \frac{1}{2}\sqrt{5} = 1,245938374052415061041474$; and the extent to be set off from the middle of every Side is $\frac{1}{2}b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} - 4\sqrt{4450} - 1990\sqrt{5} = ,23795305550012124597625178 =$ half the Side of the *Dodecaedron*: Its Altitude will be $b\sqrt{15} - 2\sqrt{5} - 4\sqrt{10} - 2\sqrt{5} = 1,05985848504451316672009586$. The longer Part of the Diagonal of the Pentagon or Base $= b\sqrt{\frac{13}{2}} - \frac{5}{2}\sqrt{5} - 8\sqrt{85} - 38\sqrt{5} = ,4048299180,22031,918783$. The shorter Part $= \frac{1}{2}b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} - 4\sqrt{50} - 22\sqrt{5} = ,32751,42835,11240,6238567543$. The whole $= \frac{1}{2}b\sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} - 20\sqrt{50} - 22\sqrt{5} = ,73234420152272542629$. The Radius of the Sphere circumscribing the *Dodecaedron* $= b\sqrt{\frac{3}{2}} - 30\sqrt{5} - 3\sqrt{650} - 290\sqrt{5} = ,66686750153680282557223956$. To

To delineate it (1.) draw Diameters parallel to all the Sides of the Pentagons; or *Plate III.* the Sides being bisected make $IH = LF = \frac{1}{2}b\sqrt{\frac{27}{5}} - \frac{4}{3}\sqrt{5} - 8\sqrt{\frac{3}{5}} - \frac{1}{10}\sqrt{5} =$ *Fig. 53.*
 $= ,10641584151641026464975867$, and draw FH, &c. (2.) Upon every Side from all the Angles set off $DO = b\sqrt{39670} - 17286\sqrt{5} - 4\sqrt{154251890} - 68955542\sqrt{5} =$
 $= ,213427582518576353377517$; and $BR = EP = \frac{4}{10}b\sqrt{742095} - 331868\sqrt{5} -$
 $- 4\sqrt{66755210260} - 29853837592\sqrt{5} = ,05766923871982197724598348$. Joyn
FR, HP, PO, RO; whereby the Segment HFROPHEDBF may be cut off; and Three like
this may be cut off every Angle of the Dodecaedron; in all Sixty.

3. To form the Body of Eighty Triangles so as its Altitude may be $= b = 1$. An Icosaedron may be cut by either of the Methods before directed, and all its Parts must be as there exprest: Then bisect every Side, and connect each two of those Points by Lines parallel to the other Side, which will form Twenty equilateral Triangles in the middle of the greater. These Lines will be the Bases of the sixty Isosceles Triangles, and comprehend the Bases of Twelve Pentagonal Pyramids, represented, *Fig. 54.* by the Lines BA, BD, DE, EG, GA, whose Vertex is C. From the ends of all these Lines set off upon every Edge both ways $\frac{1}{4}b\sqrt{3} - \frac{1}{4}b\sqrt{15} - \frac{1}{4}b\sqrt{\frac{15}{5}} - \frac{3}{4}\sqrt{5} = ,17874375199898794305 =$
 $= BI = GK$, and $\frac{1}{4}b\sqrt{3} - b\sqrt{15} - \frac{1}{4}b\sqrt{\frac{15}{5}} - \frac{3}{4}\sqrt{5} = ,2168090212602117458358744 =$
 $= AH$. Draw the Lines DI, EK, KH, HI; whereby the Segment DCEKHID may be cut off, and one like this off either half of every Edge of the Icosaedron; in all Sixty, finishing the Body by 78 or 80 Sections.

4. The Body of Thirty Rhombs being cut as before directed, the Solid of Ninety Bases may be most conveniently form'd therefrom. Suppose every Rhomb bisected by occult Lines joining the obtuse Angles, which will be the shorter Diagonals, and surround the Bases of Twelve Pentagonal Pyramids represented, *Fig. 55.* whose Vertices at C are the acuter solid Angles. From the obtuse Angles or the Extremities of those occult Lines, set off upon every Edge $\frac{1}{2}b\sqrt{\frac{5}{4}} - \frac{1}{2}\sqrt{5} = ,1816356320013422147386 = GQ = AV =$
 $= BH$. Draw the Lines GV, AQ; AH, BV, &c. which will form less Rhombs in the middle of all the greater, like GRAW, AOBP. From the same Points set off $\frac{1}{2}b\sqrt{\frac{5}{4}} - \frac{1}{2}\sqrt{5} = ,262865556059566803013 = DL = EK$. Join QK, KL, LH: Cut off the Segment AQCKLHA, and one like this both ways off every other Edge; in all Sixty, perfecting the Body by Eighty-four Sections.

5. To form the Body of One hundred and twenty Bases, so that its Altitude or Distance betwixt the parallel Rhombs shall be $= b = 1$. The Side of the Cube out of which the Dodecaedron is to be cut, must be $= \frac{1}{11}b\sqrt{130} - 38\sqrt{5} = ,12200720322185559-69462204$. The Extent to be set off from the middle of every Side, must be $= \frac{1}{11}b\sqrt{185} - 82\sqrt{5} = ,233013023792165802327729$, being equal to half the Side of the Dodecaedron. The longer Part of the Diagonal of its Base $= \frac{1}{11}b\sqrt{5} - \frac{1}{11}b = ,396425434-090717905826521517$. The shorter Part $= \frac{8}{11}b - \frac{1}{11}b\sqrt{5} = ,32071491318185641-883469659$. The whole $= \frac{8}{11}b\sqrt{5} - \frac{1}{11}b = ,7171403472725743246612172136$. The Altitude of the Dodecaedron $= \frac{6}{11}b\sqrt{5} - \frac{3}{11}b = ,037855260454430743495912$. The Radius of its circumscribing Sphere $= \frac{1}{11}b\sqrt{870} - 366\sqrt{5} = ,653022978314888774-9091376$.

To delineate and cut it (1.) Through the Centers of every Base of the Dodecaedron, draw Diameters parallel to all the Sides, as HK, *Fig. 56.* Or having bisected the Sides, from those middle Points, set off $\frac{1}{11}b\sqrt{37} - \frac{8}{11}\sqrt{5} = ,10420659216841171249600340 = NK = TH$. From the Angles of the parallel Sides set off $\frac{4}{11}b\sqrt{\frac{13}{5}} - \frac{6}{11}\sqrt{5} =$
A a a
 $= ,1125$

=,1124065286535258382745824 = EM = DF. Draw the Parallel MF: Join HM, KF. Cut off the Prism HKFMHEDK, and two like this off every Edge; in all Sixty, which Sections give the Plains of the Semi-rhombs.

Then from every Angle set off upon the Sides $\frac{1}{11}b\sqrt{25\frac{1}{2}} - \frac{1}{11}b\sqrt{5} = ,0445015276-33609711125173 = BV = Ge$: Or since this Extent is so small, from the other Angle set off $\frac{1}{11}b\sqrt{7\frac{1}{2}} - \frac{1}{11}b\sqrt{5} = ,421524519950721893529685 = eE = DV$: Or if it seem best to set it off from the middle, make $Te = NV = \frac{1}{11}b\sqrt{14\frac{1}{2}} - \frac{1}{11}b\sqrt{5} = ,1885114-9615855609120195$. Draw Lines parallel to every Side, as eV, and from the Angles opposite to those Lines (as A) set off upon the Sides $AL = \frac{1}{11}b\sqrt{25\frac{1}{2}} - \frac{1}{11}b\sqrt{5} = ,26901-55159239663711561017$; and from the adjacent Angles set off $\frac{1}{11}b\sqrt{305} - 1470\sqrt{5} = ,027503456628863478912281 = Gt = Bn$: Or if this Extent be too small, from the other Extremity of the same Sides set off $\frac{1}{11}b\sqrt{12505} - 5582\sqrt{5} = ,4385225909554-68125735 = Pt = Sn$: Or from the middle of each Side set off $\frac{1}{11}b\sqrt{7165} - 3202\sqrt{5} = ,205509567163302323415448$. Join Te, Vn, Lt, Ln. Cut off the Segment eVnLteGABV: And by Sections altogether like this every solid Angle of the Dodecaedron must be cut off three Times, amounting in all to Sixty. The Planes hereby made are the Rhombs: And due care must be taken in all to continue the Lines upon the Planes after every Section.

I am not ignorant that these Bodies may be cut in a different manner out of others, but these may be justly recommended as the shortest, easiest and most commodious Methods.

Having propos'd to give an Instance or two of an Operation in *Quadrinomial Surds*, (which, I suppose, are no where exemplified, if at all touch'd by any Author) I judg'd it not expedient by so large a Digression, to interrupt the design'd Method, but rather reserved it for this Place; these Instances including and exemplifying all the Difficulties in the Doctrine of Surds.

In the Calculation to obtain the Requisites for the Body of Eighty Triangles, there was a Necessity of working this Proportion, As $\frac{1}{4}\sqrt{\frac{63}{4}} - \frac{63}{10}\sqrt{5} - 3\sqrt{26} - \frac{58}{5}\sqrt{5}$ is to $\frac{1}{19}\sqrt{1266} - \frac{1034}{20}\sqrt{5} + \frac{3}{2}\sqrt{288605} - 128582\sqrt{5}$:: so is $\frac{1}{10}\sqrt{15} - \frac{1}{10}\sqrt{3}$ to a fourth Surd. The first Work is to make out the Reciprocal of $\frac{1}{4}\sqrt{\frac{63}{4}} - \frac{63}{10}\sqrt{5} - 3\sqrt{26} - \frac{58}{5}\sqrt{5}$. The difference of the Squares of $\frac{63}{4} - \frac{63}{10}\sqrt{5}$ and $\frac{3}{2}\sqrt{26} - \frac{58}{5}\sqrt{5}$ is $\frac{1}{10}\sqrt{85005} - 37620\sqrt{5}$, and the difference of the Squares of the Parts hereof $\frac{149528025}{160000} = \frac{5981121}{6400}$, whose Reciprocal $\sqrt{\frac{6400}{5981121}}$ drawn into $\sqrt{85005 + 37620\sqrt{5}}$ produces $\sqrt{\frac{151120 + 6680\sqrt{5}}{664569}}$, by which $\frac{1}{4}\sqrt{\frac{63}{4}} - \frac{63}{10}\sqrt{5} + 3\sqrt{26} - \frac{58}{5}\sqrt{5}$ being multiply'd, $8\sqrt{7595 + 2814\sqrt{5} + \frac{4}{3}\sqrt{11129050 + 4752910\sqrt{5}}}$ the Product is the Reciprocal desired: By this 'tis most convenient only to multiply the second Term $\frac{1}{19}\sqrt{1266} - \frac{1034}{20}\sqrt{5} + \frac{3}{2}\sqrt{288605} - 128582\sqrt{5}$ first, since the Root of the Product may probably be extracted, and thereby the rest of the Operation much eased: $7595 + 2814\sqrt{5} \times 1266 - \frac{10341\sqrt{5}}{20} = \frac{4680753}{2} - \frac{1457883\sqrt{5}}{4}$; and $\frac{4}{3}\sqrt{11129050 + 4752910\sqrt{5}} \times \frac{3}{2}\sqrt{288605} - 128582\sqrt{5}$ is $\sqrt{156206107150 - 59281916550\sqrt{5}}$: The Square Root hereof $309090\sqrt{5} - 383590$ added to $\frac{4680753}{2} - \frac{1457883\sqrt{5}}{4}$ makes $\frac{3913573}{2} - \frac{221523\sqrt{5}}{4}$ which divided by 73841 , the Quotient $\frac{13}{2} - \frac{3}{4}\sqrt{5}$ is that Part of the *Quadrinomial Surd* resulting from the Multiplication, which is not under a double Radical Sign. To make out

out the other Part, which is to be included under another $\sqrt{}$, one Part is 1266 — $\frac{10341\sqrt{5}}{20} \times \sqrt[4]{11129050 + 4752910\sqrt{5}}$; the Product whereof is $= aa = 2847185253970$

— $1064601874442\sqrt{5}$: The other Part is $7595 + 2814\sqrt{5} \times \frac{1}{2}\sqrt{288605} = 128582\sqrt{5}$, which produce $ee = \frac{5342946006825 - 1545743318490\sqrt{5}}{5}$. To add these two Surds together (being the greatest Labour) all the Parts thereof, multiplied respectively, produce $93761453018973167854032600 - 40356511666942700687887800\sqrt{5} = aae$: To extract the square Root hereof, from the Square of the 1st Part Subtract the Square of the latter.

That is, from $87912,10072,22911,25723,73958,06915,28960,15860,08186,27600,00$

Take $81432,40169,62041,15908,67345,67892,54686,56548,12694,42000,00$

of the Remainder $6479,69902,60870,09815,06612,39022,74273,59311,95491,85600,00$

extract the square Root $= 25455252947254344294368400$, which added to $93761453018973167854032600$

the greater Part, makes $\frac{119216705966227512148401000}{16}$: The Root

of half of this is $= \frac{3452777229510\sqrt{5}}{4}$. Subtract the former Root from the said greater

part, there remains $\frac{68306200071718823559664200}{16}$: The Root of half hereof is $\frac{5844065368890}{4}$.

To the Sum of the two square Surds above $aa + ee = \frac{16731687022705 - 58041508162584\sqrt{5}}{4}$

add $2ae$ the double of the two last found Roots $= - \frac{11688130737780 + 6905554459020\sqrt{5}}{4}$.

The parts of the Sum $\frac{5043556284925 + 1101403642762\sqrt{5}}{4}$ divided severally by 5452493281

the Square of 73841 , quote $\frac{1}{2}\sqrt{925} + 202\sqrt{5}$; so that the second Term in the Proportion $\frac{1}{2}\sqrt{1266} - \&c.$ divided by the first $\frac{1}{4}\sqrt{\frac{63}{5}} - \frac{63}{5}\sqrt{5} - \&c.$ yields in the Quotient

$\frac{8}{12}\sqrt{\frac{5}{3}} - \frac{3}{4}\sqrt{5} + \frac{1}{2}\sqrt{925} + 202\sqrt{5}$. To extract the square Root hereof, let the former

part $\frac{8}{12}\sqrt{\frac{5}{3}} - \frac{3}{4}\sqrt{5}$ be $= b$, the latter $\frac{1}{2}\sqrt{925} + 202\sqrt{5} = c$, from the Square of half the

former Part, i. e. $\frac{1}{4}bb = \frac{11281 - 636\sqrt{5}}{64}$, subtract the Square of half the latter $\frac{1}{4}cc =$

$= \frac{3700 - 808\sqrt{5}}{64}$: The square Root of the Remainder $\frac{7581 - 1444\sqrt{5}}{64}$ i. e. $\sqrt{\frac{1}{4}bb - \frac{1}{4}cc} =$

$\frac{1}{4}\sqrt{5} - \frac{1}{8}$, added to $\frac{1}{2}b$, i. e. to $\frac{8}{12}\sqrt{\frac{5}{3}} - \frac{3}{4}\sqrt{5}$, is $\frac{8}{12}\sqrt{\frac{5}{3}} + \frac{3}{8}\sqrt{5} = \frac{1}{2}b + \sqrt{\frac{1}{4}bb - \frac{1}{4}cc}$;

the square Root hereof is $\frac{5}{4}\sqrt{5} + \frac{7}{4}$; and $\frac{1}{2}b - \sqrt{\frac{1}{4}bb - \frac{1}{4}cc}$, is $\frac{1}{2}\sqrt{5} - \frac{4}{3}\sqrt{5}$, whose

square Root is $\frac{1}{2}\sqrt{\frac{1}{2}\sqrt{5} - \frac{4}{3}\sqrt{5}}$; therefore $\frac{8}{12}\sqrt{\frac{5}{3}} - \frac{3}{4}\sqrt{5} + \frac{1}{2}\sqrt{925} + 202\sqrt{5}$ is $=$

$= \frac{1}{2}\sqrt{5} + \frac{1}{4} + \frac{4}{12}\sqrt{\frac{1}{2}\sqrt{5} - \frac{4}{3}\sqrt{5}}$. This drawn into $\frac{1}{12}\sqrt{15} - \frac{1}{12}\sqrt{3}$ the third Term,

gives the Fourth $= \frac{2}{3}\sqrt{3} + \frac{1}{3}\sqrt{15} + \frac{1}{3}\sqrt{435} - 186\sqrt{5}$. Q. E. F.

Another Example, which occur'd in the Calculation for cutting the Body of 60 Semi-

Rhombs out of the Dodecaedron, may be to subtract $2\sqrt{510} - 225\sqrt{5} - 2\sqrt{122365} - 54718\sqrt{5}$

out of $\sqrt{\frac{5}{2}} - \frac{2}{3}\sqrt{5} - 4\sqrt{50} - 22\sqrt{5}$: Call the former e , the latter a . The Sum of

the Squares, viz. $aa + ee$ is $\frac{4133}{2} - \frac{132}{3}\sqrt{5} - 4\sqrt{50} - 22\sqrt{5} - 8\sqrt{122365} - 54718\sqrt{5}$;

To reduce these two Surd Roots into one, The Sum of their Squares, viz. $7831360 -$

$- 3501952\sqrt{5} + 800 - 352\sqrt{5}$ is $7832160 - 3502304\sqrt{5}$: The Square of their Rect-

angle

angle is $12428523520 - 5558200320\sqrt{5}$; the double of the Root hereof $157760 - 70464\sqrt{5}$ added to the Sum of the Squares, makes $7989920 - 3572768\sqrt{5}$; therefore $aa + ee = \frac{4133}{2} - \frac{1821}{2}\sqrt{5} - 4\sqrt{499370} - 223298\sqrt{5}$. To make the Square of the double Rectangle, or $4aee$; $110 - 42\sqrt{5} \times 2040 - 900\sqrt{5} = 413400 - 184680\sqrt{5}$, to which add $315520 - 140928\sqrt{5}$ the Root of the Product of the two Surd Roots, the Sum $728920 - 325608\sqrt{5}$ is the former or greater Part: To compose the less $2040 - 900\sqrt{5} \times 16\sqrt{50} - 22\sqrt{5} = 16\sqrt{814500000} - 364255200\sqrt{5}$; and $110 - 42\sqrt{5} \times 8\sqrt{122365} - 54718\sqrt{5}$ is $16\sqrt{1271961850} - 568838290\sqrt{5}$. To unite these two Surd Roots, the Sum of their Squares is $2086461850 - 933093490\sqrt{5}$. The Square of the Rectangle, or the Product of these two Surds, is $20720244522830400000 - 926637505269120000\sqrt{5}$. The double of the Root hereof $2035694400 - 910389600\sqrt{5}$, added to the last Sum of the Squares, makes the Sum of the two Surds equal to $16\sqrt{4122156250} - 1843483090\sqrt{5}$; So that $4aee = 728920 - 325608\sqrt{5} - 16\sqrt{4122156250} - 1843483090\sqrt{5}$ is the Square of the double Rectangle. To extract its Root, let the former Part $728920 - 325608\sqrt{5}$ be $= b$, the latter $= c$: Then $\frac{1}{4}bb - \frac{1}{4}cc = 1538803680 - 68817320\sqrt{5}$, and its Root, i. e. $\sqrt{\frac{1}{4}b^2 - \frac{1}{4}c^2} = 27740 - 12404\sqrt{5}$, added to and subtracted from $\frac{1}{2}b$, gives $\frac{1}{2}b + \sqrt{\frac{1}{4}b^2 - \frac{1}{4}c^2} = 392200 - 17508\sqrt{5}$, and $\frac{1}{2}b - \sqrt{\frac{1}{4}b^2 - \frac{1}{4}c^2} = 336720 - 150400\sqrt{5}$, whose Root is $188\sqrt{5} - 400$; therefore the double Rectangle or $2ae$ is $= \sqrt{392200 - 17508\sqrt{5}} - 188\sqrt{5} + 400$: This subtracted from the Sum of the Squares $\frac{4133}{2} - \frac{1821}{2}\sqrt{5} - 4\sqrt{499370} - 223298\sqrt{5}$, leaves $\frac{3333}{2} - \frac{1441}{2}\sqrt{5} - 4\sqrt{499370} - 223298\sqrt{5} - \sqrt{392200 - 17508\sqrt{5}}$. To the Sum of the Squares of these two Surd Roots $= 8382120 - 3747976\sqrt{5}$, add $3583136\sqrt{5} - 3538720$, the Root of $25054137210840 - 11204550051840\sqrt{5}$ the Square of the double Rectangle: The Root of the Sum is $2\sqrt{1210850} - 541210\sqrt{5}$: So that $\sqrt{\frac{3333}{2} - \frac{1441}{2}\sqrt{5}} - 2\sqrt{1210850} - 541210\sqrt{5}$ is $= \sqrt{\frac{5}{2}} - \frac{1}{2}\sqrt{5} - 4\sqrt{50} - 22\sqrt{5} - 2\sqrt{510} - 225\sqrt{5} - 2\sqrt{122365} - 54718\sqrt{5}$. Q. E. F.

Hereby it appears how operose and tedious the Management of these Quadrinomial Surds must necessarily be: And if this Course be not taken to contract and keep them within due Bounds, they will quickly excur into such an intolerable Number of Terms as will puzzle and confound the most acute and dextrous Artist. JU 67

F I N I S.

Fig.

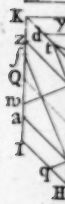
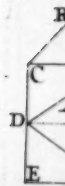


Plate I.

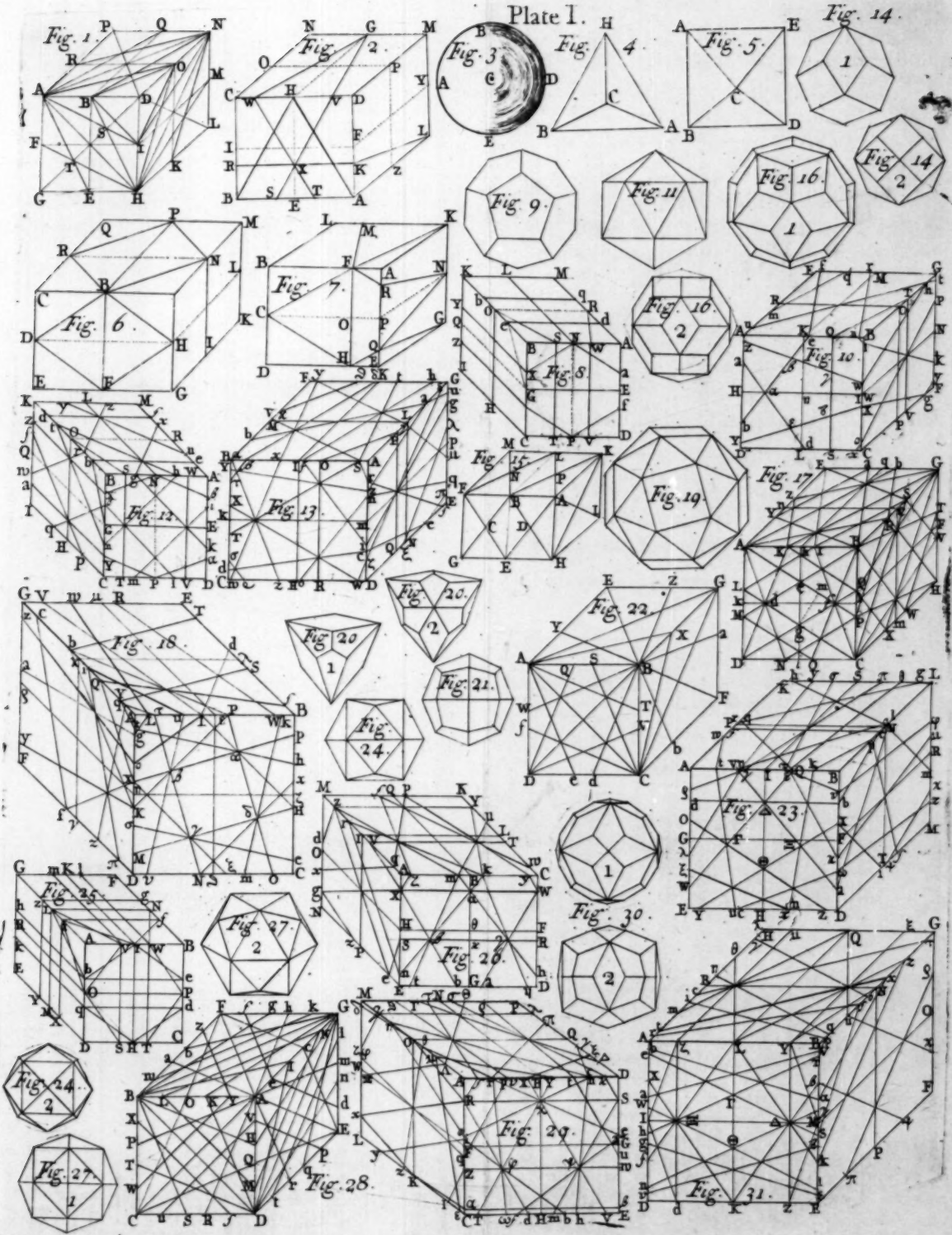


Fig.



Plate II.

